

20040215.qrp v03_n197.qrl.20040215

Date: Sun, 15 Feb 2004 19:03:06 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 3197

QRP-L Digest 3197

Topics covered in this issue include:

- 1) [167997] RE: PROPER soldering technique
by "Joe Mann" <joemann@chicagonet.net>
- 2) [167998] Re: PROPER soldering technique
by Brad Thompson <Brad.Thompson@Valley.net>
- 3) [167999] Re: PROPER soldering technique
by Bruce Muscolino <w6toy@erols.com>
- 4) [168000] re: AmQRP Contest
by "ki0ky" <ki0ky@earthlink.net>
- 5) [168001] FS: QRP Publications
by no1e@comcast.net
- 6) [168002] Re: BPL, it is time to write
by "n3drk" <n3drk@triad.rr.com>
- 7) [168003] Re: PROPER soldering technique
by "Mike Yetsko" <myetsko@insydesw.com>
- 8) [168004] Re: Learn the code
by "Jason Hsu" <jhs001@heronetwork.com>
- 9) [168005] Online soldering ref. w/pix (Re: PROPER soldering technique)
by Brad Thompson <Brad.Thompson@valley.net>
- 10) [168006] Re: AmQRP Contest
by Michael Neverdosky <mikenever@earthlink.net>
- 11) [168007] Re: DX with QRP today
by <bill@n4qa.com>
- 12) [168008] Homebrewer2: A cold day in @\$#%#%#%#?
by "Lew Paceley" <lew@paceley.com>
- 13) [168009] Ooops: charged Alkalines in NiMH charger....and it worked ;)
by Wayne Burdick <n6kr@elecraft.com>
- 14) [168010] Re: DX with QRP today
by "Lawrence Makoski" <Makos327@worldnet.att.net>
- 15) [168011] Serial DDS: PIC controls DDS via PC serial port
by "George Heron N2APB" <n2apb@clearviewcatv.net>
- 16) [168012] For Sale: Unbuilt Mini-Boots Amplifier Kit
by Noah Lorang <NoahLorang@nc.rr.com>
- 17) [168013] Would Bob who finished his WAS on 160m please email me?
by "John A. Evans - N0HJ" <jaevans@codenet.net>
- 18) [168014] Sunday Morning SSB/CW QRP Net
by "Ken La Rose" <kenlar@csolve.net>
- 19) [168015] Re: Linux (KPSK) Help needed

by Mikael Czerski <arcticfox@midgardsormen.net>
20) [168016] Re: BPL, it is time to write
by ham@w3eax.umd.edu
21) [168017] Re: Learn The Code
by PMdc361@aol.com
22) [168018] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by "Leon Heller" <leon_heller@hotmail.com>
23) [168019] Re: K2 - Use it as an antenna impedance analyzer
by Wayne Burdick <n6kr@elecraft.com>
24) [168020] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by "Mike Yetsko" <myetsko@insydesw.com>
25) [168021] Homebrewer #2
by Rick McKee <kc8aon@juno.com>
26) [168022] Re: Learn the code
by Karl Larsen <k5di@zianet.com>
27) [168023] Re: Learn the code
by Bruce Muscolino <w6toy@erols.com>
28) [168024] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by John Sielke <jsielke@pobox.com>
29) [168025] Re: Tin Ear Receiver - reservations
by "Walter AG5P" <walter@accessus.net>
30) [168026] Re: Learn the code
by John Sielke <jsielke@pobox.com>
31) [168027] RE: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
32) [168028] [Elmer 160] PIC El Programming Problems
by "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
33) [168029] ELSIE Kit online order status checking available
by "George Heron N2APB" <n2apb@clearviewcatv.net>
34) [168030] Re: Serial DDS: PIC controls DDS via PC serial port
by "Brian Riley (maillist)" <n1bq_list@wulfdn.org>
35) [168031] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by "Nick Kennedy" <wa5bdu@tcainternet.com>
36) [168032] Tiny radios & checking your work
by Nils R Young <nilsbull@juno.com>
37) [168033] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by John Sielke <jsielke@pobox.com>
38) [168034] Re: Serial DDS: PIC controls DDS via PC serial port
by Dave Ek <ekdave@earthlink.net>
39) [168035] RE: Learn the code
by "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
40) [168036] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by "Mike Yetsko" <myetsko@insydesw.com>
41) [168037] Re: Serial DDS: PIC controls DDS via PC serial port
by "George Heron N2APB" <n2apb@clearviewcatv.net>
42) [168038] RE: Ooops: charged Alkalines in NiMH charger....and it worked ;)
by "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
43) [168039] Re: [Elmer 160] PIC El Programming Problems

by "Lew Paceley" <lew@paceley.com>
44) [168040] Fw: RH-40 discrepancy (Red Hot radio)
by "Joseph Trombino Jr" <w2kj@bellsouth.net>
45) [168041] Z Antenna Systems
by "Jeff Davis" <jeff@ke9v.net>
46) [168042] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by "Bill Rowlett" <kc4atu@hotmail.com>
47) [168043] Re: Learn the code
by "Dale Anderson \ (KB0VCC\)" <KB0VCC@Adelphia.Net>
48) [168044] Re: [Elmer 160] PIC El Programming Problems
by "Craig Johnson" <cbjohns@cbjohns.com>
49) [168045] RE: [Elmer 160] PIC El Programming Problems
by "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
50) [168046] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by "Walter AG5P" <walter@accessus.net>
51) [168047] RE: [Elmer 160] PIC El Programming Problems
by "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
52) [168048] Re: DX with QRP today
by Garie Halstead K8KFJ <khyberpass65@yahoo.com>
53) [168049] RE: Z Antenna Systems
by "Ray Goff" <radioham@gmx.co.uk>
54) [168050] RE: Learn the code
by "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
55) [168051] Re: RH-40 discrepancy (Red Hot radio)
by "Leon Heller" <leon_heller@hotmail.com>
56) [168052] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by "Nick Kennedy" <wa5bdu@tcainternet.com>
57) [168053] Re: [Elmer 160] PIC El Programming Problems
by "John J. McDonough" <wb8rcr@arrl.net>
58) [168054] Norcal 40A Information needed
by Mercxx@aol.com
59) [168055] RE: [Elmer 160] PIC El Programming Problems
by "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
60) [168056] Re: [Elmer 160] PIC El Programming Problems
by "John J. McDonough" <wb8rcr@arrl.net>
61) [168057] Re: Z Antenna Systems
by "Russ Hines" <wb8zcc@fuse.net>
62) [168058] Head Copy Tips...Anyone?
by "Pieter Gaskin" <pgaskin@twcnny.rr.com>
63) [168059] Re: Z Antenna Systems
by Ed Tanton <n4xy@earthlink.net>
64) [168060] Re: [Elmer 160] PIC El Programming Problems
by "Craig Johnson" <cbjohns@cbjohns.com>
65) [168061] RE: [qrp-l] Re: Tin Ear Receiver - reservations
by Mark Hogan <n5obc@yahoo.com>
66) [168062] Re: Head Copy Tips...Anyone?
by Frank Brickle <brickle@pobox.com>
67) [168063] RE: [Elmer 160] PIC El Programming Problems

by "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
68) [168064] Re: Head Copy Tips...Anyone?
by "Tony Martin W4FOA" <w4foa@comcast.net>
69) [168065] RE: [qrp-l] Head Copy Tips...Anyone?
by "Nick Kennedy" <wa5bdu@tcainternet.com>
70) [168066] Re: Learn the code
by Tom Mc <redmen1969@optonline.net>
71) [168067] Fw: Z Antenna Systems
by Tom Mc <redmen1969@optonline.net>
72) [168068] Re: Head Copy Tips...Anyone?
by Mark Hogan <n5obc@yahoo.com>
73) [168069] CW: Love on the Wire...
by "LEE HOPPER" <leehopp@msn.com>
74) [168070] Pesky Texan Armadillo Chase (email 2)
by "N1LN_TXU" <n1ln@txucom.net>
75) [168071] The Time Is Drawing Near
by "Jerry Ford" <benlightnd13@mchsi.com>
76) [168072] RE: [qrp-l] Head Copy Tips...Anyone?
by Peter Burbank <peterlee@qx.net>

Date: Sat, 14 Feb 2004 18:08:55 -0600
From: "Joe Mann" <joemann@chicagonet.net>
To: "qrp-l" <qrp-l@Lehigh.edu>
Subject: [167997] RE: PROPER soldering technique
Message-ID: <000a01c3f357\$e6884360\$7b03bb42@joeii>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jason,

I doubt if there is a single person subscribed to this list that follows the routine you have described.

I suspect the operative rule of thumb for most is: "If the lead is in the way, cut it to its final length, then solder, else solder and then cut to its final length."

Why? I have other ways to spend my time.

Joe, K9HDE

PS I doubt that any of us has equipment capable of accurately measuring the amount of RF radiated from a rounded blob of solder as opposed to a 1/8" lead extending from a rounded blob of solder. Non-issue -

Forgeddaboutit!

> -----Original Message-----

> From: owner-qrp-1@Lehigh.EDU

> [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of

> Jason Hsu

> Sent: Saturday, February 14, 2004 4:08 PM

> To: Low Power Amateur Radio Discussion

> Subject: Re: PROPER soldering technique

>

>

> Thanks for the suggestions on proper soldering technique.

>

> One more question:

> Do you cut off the excess lead length BEFORE or AFTER

> soldering the lead to

> the PC board? I think both answers are correct. There seems to be a

> balancing act: having TOO much excess lead length causes the

> lead to get in

> the way and also causes the lead to take longer to heat up.

> On the other

> hand, cutting off too much of the lead causes you to risk having

> insufficient lead length, which can mean botched soldering

> jobs. The answer

> to me seems to be to leave just a little bit of excess at

> first, then solder

> the lead in, and then trim the remaining excess when you are

> finished. Does

> anyone here disagree with me on this? If so, why?

>

> Jason Hsu, AG4DG

> personal AAAATTTT jasonhsu.com

> <http://www.jasonhsu.com/ee.html>

> <http://groups.yahoo.com/group/eeham/>

> http://groups.yahoo.com/group/resume_hyperinflation_fighters/

> <http://groups.yahoo.com/group/gmu-ece-control/>

>

> ---

> Incoming mail is certified Virus Free.

> Checked by AVG anti-virus system (<http://www.grisoft.com>).

> Version: 6.0.586 / Virus Database: 371 - Release Date: 2/12/04

>

Date: Sat, 14 Feb 2004 18:17:50 -0500

From: Brad Thompson <Brad.Thompson@Valley.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [167998] Re: PROPER soldering technique
Message-ID: <5.0.2.1.2.20040214175342.02052150@pop3.norton.antivirus>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 11:43 AM 02/14/2004 -0500, you wrote:<snip>

>I have had no formal training in soldering, but I've surfed the web looking
>for suggestions on soldering techniques, and it seems that one mistake I
>made is applying the soldering iron tip directly to the solder.

Hello, Jason--

Apply heat to the components and then apply solder. When you use the iron's hot tip to carry molten solder to the connection, you "cook off" the solder's built-in flux and there's none left to clean oxides off the components' leads. The result: crummy connections and cold joints.

> The changes
>I will make from now on to my soldering procedure are:
>1. Apply the soldering iron tip to the lead of the component I'm trying to solder to the PC board. Then apply the solder to the lead instead of the soldering iron itself. One benefit is that the crud on the soldering iron tip won't get into the solder.

Good. Dedicate a damp sponge or paper towel pad to wipe oxides and burned crud off the iron's tip.
Don't use the sponge for anything else, as the sponge gets contaminated with lead and tin.

>2. Don't solder a wire from one circuit board to a second circuit board until BOTH boards are finished. It's better to solder in two separate wires, label the two wires, put unheated shrink wrap on them, and wait until finishing BOTH boards before making the permanent connection (solder + heat shrink wrap).

Shrink wrap? I assume that you're soldering the junction of two wires and then applying heat-shrinkable tubing to insulate the connection? "Shrink wrap" refers to sheets of plastic film that get applied to products for safety or theft prevention.

In general, you should build and debug each board separately and then integrate

the working boards. You can use standoffs to temporarily mount a circuit board on a piece of plywood or pine board for ease of handling and run the flying leads to a terminal strip for application of power.

>Some questions I have:

>1. When you solder leads to a circuit board, should you bend them to help
>secure them to the board? One site I looked at showed pictures in which the
>leads of the component were NOT bent. I'm not sure how the component is
>supposed to be secured to the board. This also contradicts other tips that
>say that the solder is meant to be only an electrical connection and NOT a
>mechanical one.

You don't have to bend the leads much-- just enough to hold the component close to the circuit board. In effect, you're providing mechanical support via the slight degree of pressure between lead and board and the solder provides the electrical connection.

Keep in mind that the theory behind providing a robust mechanical connection between, say, a component lead and a turret-terminal post dates from military-equipment construction techniques and QA procedures.

You can experiment with a scrap PC board and, say, a 0.25-watt resistor. Pass one lead straight through the PC board and solder it to the pad. Anchor the PC board in a vise. Grab the resistor's free lead with pliers and pull straight away from the board. What fails-- the resistor's body or the soldered joint?

Repeat the experiment with another component, but this time bend the lead at 90 degrees so that it lays flat against the board. Repeat the "pull test". Report on your findings.

>2. Are you supposed to heat diode leads with the soldering iron tip? The
>trouble is that diodes are more fragile than other components (like
>resistors and capacitors) and can break apart from excessive heat. I know
>this from experience.

In general (again!), you should use a heat sink (for example, a flat-jawed Mueller copper "Mini-gator" clip or a pellet of wet tissue paper) between the body

of any heat-sensitive component and the soldered connection while you're soldering.

>3. Can you heat thicker leads with the soldering iron tip?

Sure, if the iron provides enough heat and has a tip with enough thermal mass.

> Thin leads

>(such as those from pF ceramic capacitors) are easy to heat. However, the
>thicker leads of certain components (like heavy-duty metal oxide resistors)
>are more difficult to heat.

You may need two or more soldering irons depending on the project.

>4. How are you supposed to clean the soldering iron tip? A few sites say
>that you should NOT use a wet sponge.

Huh? A wet sponge works fine; one of the solder vendors offers a small block of a chemical (sal ammoniac?) for tip cleaning. Always apply fresh solder after wiping the tip. Filing or sanding a plated soldering-iron tip will remove the plating and ruin the tip, though.

>5. What is the proper procedure for soldering bus wire? Sometimes the
>copper trace on the PC board doesn't have enough holes, so you need to
>connect separate traces. Every time I've used bus wire (or the leads of a
>component) to make such a connection, I've ended up with a big, sloppy mass
>of solder.

If it works, that's okay. Use less solder.

73--

Brad AA1IP

Date: Sat, 14 Feb 2004 19:40:25 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: Jason Hsu <reply@jasonhsu.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [167999] Re: PROPER soldering technique
Message-ID: <402EBFF9.879CC464@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jason,

As a once NASA certified solder technician let me take a shot at answering your questions. We had to go to a soldering class put on by our employer that lasted some 40 hours. As a text/reference book we used a pamphlet from Weller, I think. It covered ALL of your questions, and you might contact Weller to see if they still print it.

1. We were taught that nothing solders like solder. Never depend on solder for mechanical strength. To depend on it only for electrical connections. This may not be evident until you have some connection come apart in a spacecraft or a fly-by-wire flight control system. Then the ground is either way too far away or getting very large in your windscreen!

Always apply the soldering iron directly to the entire joint to be soldered. Let the heated joint melt the solder. Solder is only applied to the joint, and sparingly. This will ensure a good joint. BTW, you can easily tell a good joint from a cold one by its appearance. The good joint will be shiny while the cold one will have a dull grainy appearance. This is one place where a printed booklet may be of more help than a computer presentation.

2. Yes, make all interconnections between boards after each board is completed and tested if possible. Solder a pigtail to one board and then, when ready, connect it to the other board. This is neater and less prone to failure than soldering two wires together and using heat shrink tubing.

Your questions.

1. Insert the component into the circuit board and gently bend the leads apart enough to hold the component in place. Then solder the leads and use side cutters or nippers to remove any excess lead. This is the accepted aerospace way, they are not in a hurry to find out if "it" works or "how it works". Kit builders often are, and may and do solder multiple components at one time. I do it myself, but I offer this one caution. Don't solder more than about 6 components in at one stretch, and solder components of similar height at one time. You often will have a problem seating, say, resistors and electrolytic capacitors at the same time.

2, 3, and 4. Apply heat evenly to the joint to be soldered. It really does not matter whether the joint to be soldered consists of a resistor or a diode. You use the term soldering iron tip. This is the point where the heat is applied, it is applied to the joint in order to heat

it.

5. The best way to apply bus wire, whether it is for board repair or to extend component connection, is to first measure the amount of bus wire needed, second, form the wire to shape, third, solder one end of it in place, and fourth, solder the other end. If you insist on putting a fillet of solder along the wire, do this last by running your iron along side the bus wire and carefully adding solder.

Solder can best be removed from small areas of the circuit board for such things like removing a component with solder wick. Keep both sizes on hand, wide and narrow. To use, heat the soldered joint through the solder wick.

Soldering iron tips can be cleaned by brushing the hot tip over a wetted sponge. This should be done immediately BEFORE making a solder joint. A clean tip transfers heat better with no crud or anything else trapped on the tip.

The process removes both solder and flux from the tip. Soldering replaces solder and flux on the tip. Also, clean the tip when through for the day and re-tin the iron while it is still hot. This will protect the tip.

A few years ago there was a move toward tip cleaning using steel wool, or coiled steel or a steel wire brush. I don't use the method, but then I'm not doing high volume industrial work.

Practice on a scrap circuit board first. Try not to make your first projects the scrap boards.

Bruce

> 2. Don't solder a wire from one circuit board to a second circuit board
> until BOTH boards are finished. It's better to solder in two separate
> wires, label the two wires, put unheated shrink wrap on them, and wait until
> finishing BOTH boards before making the permanent connection (solder + heat
> shrink wrap).

>

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> 1. When you solder leads to a circuit board, should you bend them to help
> secure them to the board? One site I looked at showed pictures in which the
> leads of the component were NOT bent. I'm not sure how the component is
> supposed to be secured to the board. This also contradicts other tips that
> say that the solder is meant to be only an electrical connection and NOT a
> mechanical one.

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> trouble is that diodes are more fragile than other components (like
> resistors and capacitors) and can break apart from excessive heat. I know
> this from experience.

> 3. Can you heat thicker leads with the soldering iron tip? Thin leads
> (such as those from pF ceramic capacitors) are easy to heat. However, the
> thicker leads of certain components (like heavy-duty metal oxide resistors)
> are more difficult to heat.
> 4. How are you supposed to clean the soldering iron tip? A few sites say
> that you should NOT use a wet sponge.
> 5. What is the proper procedure for soldering bus wire? Sometimes the
> copper trace on the PC board doesn't have enough holes, so you need to
> connect separate traces. Every time I've used bus wire (or the leads of a
> component) to make such a connection, I've ended up with a big, sloppy mass
> of solder.
>
> Jason Hsu, AG4DG
> personal AAAATTTT jasonhsu.com
> <http://www.jasonhsu.com/ee.html>
> <http://groups.yahoo.com/group/eeham/>
> http://groups.yahoo.com/group/resume_hyperinflation_fighters/
> <http://groups.yahoo.com/group/gmu-ece-control/>

Date: Sat, 14 Feb 2004 17:55:14 -0700
From: "ki0ky" <ki0ky@earthlink.net>
To: <qrp-l@lehigh.edu>
Subject: [168000] re: AmQRP Contest
Message-ID: <000301c3f35e\$5f8c2000\$8a48fea9@desktop>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

How about "NAT?"

Steve KI0KY

Date: Sun, 15 Feb 2004 01:10:26 +0000
From: no1e@comcast.net
To: qrp-l@lehigh.edu
Subject: [168001] FS: QRP Publications
Message-ID: <021520040110.4626.219@comcast.net>

If anyone is interested in old qrp or amateur radio
publications, I have the following for sale.

Frank - N01E

1. QRP Quarterly

1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002

All in very good to excellent condition

\$15 / year plus shipping

2. QRPp - Journal of the No. California QRP Club

1996, 1997, 1998, 1999, 2000, 2001

Excellent condition

\$10 / year plus shipping

5. HF Antennas for All Locations (1986) by L.A. Moxon G6XN

Low Band DXing (1987) by John Devoldere

\$20 + shipping

6. ARRL Handbooks

1965
1972
1974
1981

All in good to very good condition

Best Offer + shipping

7. ARRL - A Course in Radio Fundamentals by George Grammer - copyright 1960

ARRL - Understanding Amateur Radio by George Grammer - copyright 1964

ARRL - The Radio Amateur's VHF Manual by Edward Tilton - copyright 1972

ARRL - FM and Repeaters for the Radio Amateur by ARRL Hqtrs Staff - copyright
1972

All in good to very good condition (first 2 books cover things that glow
in the dark)

\$15.00 + shipping

Date: Sat, 14 Feb 2004 20:21:01 -0500

From: "n3drk" <n3drk@triad.rr.com>

To: <kc4atu@hotmail.com>,

"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [168002] Re: BPL, it is time to write

Message-ID: <000901c3f361\$f94c72a0\$6400a8c0@n3drk>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I would like to know the "official" response from the ARRL on what to do
now!
73's
john

----- Original Message -----

From: "Bill Rowlett" <kc4atu@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Saturday, February 14, 2004 3:30 PM
Subject: BPL, it is time to write

> Well, the ARRL told us before that it was not the time to write our
elected
> officials, it is now.
>
> Letters and emails, time to open the flood gates.
>
> 73 Bill kc4atu
>
>
> -----
> Plan your next US getaway to one of the super destinations here.
> <http://special.msn.com/local/hotdestinations.armx>
>
>

Date: Sat, 14 Feb 2004 20:17:45 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <WE7X@aol.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168003] Re: PROPER soldering technique
Message-ID: <00ad01c3f362\$18787d40\$0200a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

n2uhc@yahoo.com

> writes:
> Many
> soldering irons have a bit of electromagnetism on the
> tip which attracts small bits like loose leads.
>
> Tom,
> I suspect that it is surface tension of the solder, rather than
magnetism,
> but either way, the result is very frustrating at times.
> Rod WE7X

Actually, the Wellers are magnetic. Some of them, anyway. The WCTCP
stations are.

They have a material that loses its magnetic properties when it reaches
a specific temp, causing the thermostat to open. So, as long as the iron
is calling for heat, the magnet is functional.

I have a pencil iron built that way too somewhere, although the tips
are not interchangeable with the 201 handles.

Mike

Date: Sat, 14 Feb 2004 20:28:18 -0500
From: "Jason Hsu" <jhs001@heronetwork.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [168004] Re: Learn the code
Message-ID: <001d01c3f362\$ff1337e0\$64923144@aolids1.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Oops, I meant different methods, not different messages.

I'll admit that I once did try practicing copying random letter groups. I
had such a bad experience trying it that I doubt I lasted more than 5
minutes. Then again, your mileage may vary.

Jason Hsu, AG4DG
personal AAAATTTT jasonhsu.com
<http://www.jasonhsu.com/ee.html>
<http://groups.yahoo.com/group/eeham/>
http://groups.yahoo.com/group/resume_hyperinflation_fighters/
<http://groups.yahoo.com/group/gmu-ece-control>

Date: Sat, 14 Feb 2004 20:53:50 -0500
From: Brad Thompson <Brad.Thompson@valley.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [168005] Online soldering ref. w/pix (Re: PROPER soldering technique)
Message-ID: <5.0.2.1.2.20040214205218.01bee5e0@pop3.norton.antivirus>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello--

Here's an illustrated article re: soldering practice:

<http://www.epemag.com/library.html>

Scroll down through the page to find the article on soldering.

73--

Brad AA1IP

Date: Sat, 14 Feb 2004 21:06:01 -0500
From: Michael Neverdosky <mikenever@earthlink.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [168006] Re: AmQRP Contest
Message-ID: <402ED409.59D098E3@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Do you mean Gnat?
:-)

michael N6CHV

ki0ky wrote:

>
> How about "NAT?"
>
> Steve KI0KY

Date: Sat, 14 Feb 2004 21:31:40 -0500
From: <bill@n4qa.com>
To: <qrp-1@Lehigh.EDU>
Subject: [168007] Re: DX with QRP today
Message-ID: <000301c3f36b\$d94788a0\$1a26ad80@f1n5n8>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Way to go, Doc.
Ascension Island is very rarely worked by my station.

I've been having fun on 20 (again) today with the DSW-20-RTTY rig in the WPX RTTY contest.

Have made 20 Qs in the test so far, bringing my DSW-20-RTTY total Q count to seventy-eight.

This afternoon and evening have worked ZF2NT, ZX2B, PY2NY, VE2RYY, VE3GSI, VE5RI and a host of stateside stations.

DSW-20-RTTY rig putting out 1.5 Watts to the end-fed wire (four wavelengths on 20).

Great condx today...hoping for more of the same tomorrow...

QRP is great!

73.

Bill, N4QA

Date: Sat, 14 Feb 2004 20:45:43 -0600
From: "Lew Paceley" <lew@paceley.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168008] Homebrewer2: A cold day in @\$!#%#%#?
Message-ID: <004101c3f36d\$cee67360\$6501a8c0@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I was beginning to think it would be cold day in (Austin) when my HB2 would arrive. Sure enough, at 1AM this morning it started snowing. For those not from around these parts, snow is a highly unusual event in central Texas. We had an inch or so of snow on the ground when I awoke at 7AM and, right on schedule, my HB2 was found in the mailbox a few hours later. Fortunately, the snow is already gone but the HB2 is still here.

Seriously, it's a terrific issue. "High information density". Well worth the wait. Tnx!

72/73,
Lew
N5ZE

Date: Sat, 14 Feb 2004 19:02:57 -0800
From: Wayne Burdick <n6kr@elecraft.com>
To: Elecraft <elecraft@mailman.qth.net>, qrp <qrp-1@lehigh.edu>
Subject: [168009] Ooops: charged Alkalines in NiMH charger....and it worked ;)
Message-ID: <402EE15F.F7894A52@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Don't try this at home, folks, unless you're just as intrigued as I am, and are willing to ignore about two dozen CAPITAL LETTER warnings related to batteries and rechargers: I mistakenly "recharged" four AA alkalines in a Radio Shack NiMH/NiCd quick-charger (model 23-422).

Imagine my horror, quickly downgraded to shock and then relief, when I pulled them out and found them nicely topped off. All were at equal potential of 1.53 V.

I've been using them in my digital camera, and they definitely have been recharged. I'll count how many photos I get. I'm afraid to put them in a KX1, although this is an obvious application for six rechargeable non-rechargeable alkalines.

I propose the name "KR Cells" for these very insult-tolerant AA batteries. KR means "Kinda Rechargeable."

But back to those CAPITAL LETTERS. Has anyone else tried this (on purpose or not), and are there any KR Cell experts out there who can suggest whether there are health risks associated with this activity?

tnx
Wayne
N6KR

--

<http://www.elecraft.com>

Date: Sat, 14 Feb 2004 22:26:45 -0500
From: "Lawrence Makoski" <Makos327@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [168010] Re: DX with QRP today
Message-ID: <019201c3f373\$8a576dc0\$4df44b0c@larrysahyqy001>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

It was a good day for DX with my K1, also. I worked YN4SU tonight on 30 Meters after going there because of all the RTTY on 40. 4 Watts from NJ to Nicaragua - not bad!

73 de Larry W2LJ - Vivat Morse!

W2LJ@arrl.net
<http://www.qsl.net/w2lj>

ARRL Lifemember QRP ARCI #4488 NJQRP #47
FISTS #1469 QRP-L #778 FP #612 QRPp-I #759
ARS #1528 --- K1 #1647 --- AmQRP, CQC #746

Date: Sat, 14 Feb 2004 23:22:16 -0500
From: "George Heron N2APB" <n2apb@clearviewcatv.net>
To: "NJQRP" <njqrp@njqrp.org>, "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [168011] Serial DDS: PIC controls DDS via PC serial port
Message-ID: <020001c3f37b\$4fbeb0d0\$6400a8c0@n2apb1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Combine two existing projects, add some new PIC software, and what do you get? Why it's the SerialDDS project, a new project from the AmQRP design teams. The project web page is at <http://www.amqrp.org/projects/serialDDS>

The Serial DDS Controller is a low-cost, easy to homebrew PIC+MAX232+DDS circuit that communicates with your PC over its serial port and uses a dumb terminal program like HyperTerm to allow you to control a DDS Daughtercard. The PIC software presents a menu of commands on the PC screen to allow

setting frequency, scan limits, step sizes, calibration and more! No special Windows programs required - just use the free HyperTerm on your Windows PC, or any other terminal program on your Linux PC.

DESCRIPTION

Someone recently asked a perfectly obvious question that should've had a solution before now -- "Why doesn't someone create a PIC driver that will take serial port commands from a PC and in turn drive a DDS Daughtercard?"

I had been thinking on this in the background all week and came up with a scathingly brilliant idea ... why not take two PIC projects we had done over the last year or two and combine the relevant portions of each to produce this solution?

So, being a natural project manager type of guy, I activated the AmQRp designer network once again and found some perfect help. Dave Ek, NK0E had previously designed the Serial CW Sender project that uses serial port driver software in a PIC to talk to a Palm PDA while in turn reading Morse from some paddles and driving Morse to a rig.

I also once again tapped Craig Johnson, AA0ZZ, the now-legendary designer of the PIC-EL board and the author of that wonderful "PEgen" VFO software that drives the AD9850 DDS chip on the PIC-EL board. Craig would be able to help us modify the DDS programming software in the PIC.

Well, it was a "duh" kind of moment for the three of us as we determined that the two programs (Sender.asm and PEgen.asm) would be relatively easy to combine into a single program, wherein we strip off all the Morse stuff from the Sender program and added it to a bare-essentials PEgen program without all the LCD, calibration, rotary encoder control, pushbuttons and eeprom code.

We call the combined program "SerialDDS" wherein the user enters an 'F' followed by 8 digits on a dumb terminal program (like HyperTerm or TeraTerm) running on the PC. Those eight frequency digits get turned into the DDS programming word and loaded into the DDS Daughtercard riding piggy-back on the Serial Sender. So all the user would need to do is plug the serial cable into the PC, bring up a terminal program, and the little "CLI" (command line interpreter) running in the PIC allows him to output specific frequencies via the daughtercard.

This hardware arrangement was also a stroke of serendipity in that we have extra Sender pc boards available and the DDS card fits real nice on it. (See photos at the top of the page.) The Sender project is just *ideal* for this in that it already has the MAX232 RS232 driver IC and capacitors, the DB9M connector and a PIC .. rather general purpose indeed!

So these two original designers have come up with an inexpensive solution

that allows one to use a PC to control the DDS Daughtercard, without using a special PC program! The PIC merely "talks" over the serial port to the generic terminal program running on the PC, and you see the menu of commands listing the various functions you can give to the Serial DDS Controller

COMMANDS

The PIC microcontroller is programmed to use the PC screen as its terminal, showing a list of commands available to the user. You can then enter commands and data via the PC keyboard to instruct the Serial DDS Controller to output a given frequency, set the start and end points of a range, set the step size, scan the range, calibrate the DDS and clock combination, save the settings to memory, recall the settings from memory, and reset all settings to default values.

The menu that gets displayed is shown below. Note that only some of the functions are currently working ... we're still enhancing the software to provide all the commands, and more!

A: Set Freq (Direct frequency entry from 000000000 Hz to 300000000 Hz)
B: Start Freq (Entry of a start frequency)
C: End Freq (Entry of end frequency)
D: Step Size (Entry of a step size)
E: Scan (from Start to Stop, using step size)
F: Show (show settings for start, stop, step)
G: Jog Up (using step size)
H: Jog Down (using step size)
I: Calibrate
K: Save (Save settings to EEPROM, 8 settings possible)
L: Recall (from EEPROM selective among the 8)
M: Help (display this single-word menu, without parentheticals)

For entering frequency (menu items A through D) the program will accept any number of digits up to eight and allows use of the backspace key to edit. You must hit a carriage return to finish the entry. If fewer than eight digits are entered, they are padded with leading zeros to make eight digits.

MAKING THE SERIAL DDS CONTROLLER

Construction of the project is very simple ... and you have at least two ways you can go.

1) Using the schematic provided on the project page you can build up the two ICs and the RS232 connector on a piece of perf board in several hours. Wire in the the DDS Daughtercard and your hardware will be all set.

2) You can purchase one of the left-over prototype pc boards from our Serial Sender kitting days and tack solder the 3 control wires of the DDS Daughtercard to the pads of the PIC, just like I did in the photos on the project page.

3) If you already have an NK0E Serial Sender project, such as the one in the photos here, you can tack solder the 3 control lines of the DDS Daughtercard to the pads of the PIC.

We would urge you to just wire up a simple board, burn the SerDDS software into a PIC using your favorite PIC programmer (use your PICEL board!), get the components from your junk box or using the Parts List here, place a small order to Mouser, Digi-Key and Jameco, and you'll be in business.

So, no matter how you accomplish it, just connect the three control lines between your DDS Daughtercard and the Serial CW Sender pcb, plug in the PIC containing the SerDDS software, type in any frequency from 000000001 Hz to 300000000 Hz, and see the sweet result on your scope, receiver, speaker ... whatever!

ORDERING

If you don't have the time or patience to make a completely homebrew version of the project (but we really hope you do), you can purchase either or both of the options below ...

1) Ordering the PCB - If you want to get a head start on the project by using one of the left over prototype boards we had on the Serial Sender project, you can order them "at cost" from the AmQRP club.

2) Ordering the pre-programmed PIC - If you cannot program your own PIC, you can buy a pre-programmed PIC from the AmQRP for a very modest price.

ALL THE DETAILS

See the project web page for all details ...

<http://www.amqrp.org/projects/serialDDS>

Hope you get a chance to try out this project. It's "yet another" way to control your DDS Daughtercard to produce some nice RF for your projects.

Enjoy!

73, George N2APB n2apb@amqrp.org
for the American QRP Club at <http://www.amqrp.org>

Date: Sat, 14 Feb 2004 23:29:53 -0500
From: Noah Lorang <NoahLorang@nc.rr.com>
To: qrp-l@lehigh.edu, fpqrp-l@mpna.com
Subject: [168012] For Sale: Unbuilt Mini-Boots Amplifier Kit

Message-ID: <9996655A-5F6F-11D8-A770-0003934CC5AC@nc.rr.com>
Mime-Version: 1.0 (Apple Message framework v553)
Content-Type: text/plain; charset=US-ASCII; format=flowed
Content-Transfer-Encoding: 7bit

All:

I have for sale an unbuilt AmQRP/NorCal MiniBoots Amplifier kit, which is no longer offered by NorCal (info available at <http://www.amqrp.org/kits/miniboots/index.html>).

Kit is in brand, new, unused condition. Packaging is intact. Don't have time/energy to build this kit, or a use for it, but someone else might.

\$35 or best offer, including shipping by USPS.

PayPal only.

First person to e-mail me gets it.

Noah

Date: Sat, 14 Feb 2004 21:41:53 -0700
From: "John A. Evans - N0HJ" <jaevans@codenet.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [168013] Would Bob who finished his WAS on 160m please email me?
Message-ID: <402EF891.8AB24DBA@codenet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings,

I couldn't locate the original email and would like to correspond with you. My email was acting up when your original post went to the list.

tnx es 72 - john - n0hj

Date: Sun, 15 Feb 2004 00:14:14 -0500
From: "Ken La Rose" <kenlar@csolve.net>

To: <qrp-1@Lehigh.EDU>, "QRP-Canada" <qrp-canada@neale.gpfn.sk.ca>
Cc: <ve3jev@rogers.com>,
"Tom Hamblin" <hamblin@mirusinternational.com>,
Subject: [168014] Sunday Morning SSB/CW QRP Net
Message-ID: <002301c3f382\$92c57ce0\$4812d1d8@D1YQV721>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Please join us if you can for another informal weekly QRP gathering on 40m around 7.067MHz, at 10:00 AM local (ET), 1500 UTC tomorrow morning. Listen for NCS VE3ELA on lower sideband, or break-in on CW/SSB if you hear a net participant, and they will QSP. All Hams within hearing range are invited to check in.

Last week we had a super net - very interesting indeed. We welcomed several QRP'rs checking in for the first time! Here's the complete list:

VE3RLX Ric, Brantford, ON
VE3FUL Ted, Belleville, ON
VE3KQN Jim, Pickering, ON
VE3OSC John (VA3JE), at Ont. Science Ctr., Toronto, ON
VE3QF Tony, Scarborough, ON
VE3XT Bill, Thunder Bay, ON
VE3DPC Dave, Milton, ON
VE3TKF Terry, Gravenhurst, ON
VE3RRQ Mike, Lindsay, ON
VE3AXL Phil, Kakabeka Falls, ON
VE2GB Real, L'Ascension, QC
VA3JFF Jeff, Welland, ON
VE3ILE Bill, Scarborough, ON
VE3ELA Ken, Midland, ON

Several gave reports on their FYBO adventures; VA3JFF is active again and will be putting up some new antennas; and VE2GB informed us of his QRP net Sunday afternoons starting at 1:30 PM local (1830 UTC) on 7.077 MHz. This week, we hope to have Pat VE6AAN/3 join us. He's visiting Ottawa, and has brought along a Small Wonders WM-40 SSB transceiver, with his homebrew PAC-12 vertical. Thanks for the "heads-up", Pat. We'll all be listening for you!

72,

de Ken VE3ELA

Date: Sun, 15 Feb 2004 06:38:59 +0100 (CET)
From: Mikael Czerski <arcticfox@midgardsormen.net>
To: Pastor-kc1di <elbc2@gwi.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [168015] Re: Linux (KPSK) Help needed
Message-ID: <Pine.LNX.4.56-Maildir.0402150632140.30133@yme.midgardsormen.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 14 Feb 2004, Pastor-kc1di wrote:

> Good Afternoon
>
> I know there is a vast amount of knowledge on this group so I'll ask for
> help here
>
> I've recently installed SuSE linux 8.2 pro and I'm trying to get KPSK
> (psk31 software working)
> Got it up and running but can not seem to get the waterfall to work at all.
> I remember from an install I did before that there was something that needed
> to be done in Version 8.2 but can't for the life of me remember what it is.
>
> Any help would be appreciated.
> 73/72 Dave KC1DI
>
>

OM! take a look at <http://gmfsk.connect.fi/> and also
<http://radio.linux.org.au/> .. im using gmfsk and it works perfectly
(i tried it both on PPC and x86) it supports rtty,bsk31,hell,and mfsk..

73/72 de Mike LA6IMA

Date: Sun, 15 Feb 2004 00:31:11 -0500 (EST)
From: ham@w3eax.umd.edu
To: n3drk <n3drk@triad.rr.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [168016] Re: BPL, it is time to write
Message-ID: <Pine.LNX.4.44.0402150030560.12425-1000000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I think it's time.

I think it was time last time too.

Scott Rosenfeld ARS N7JI
541-684-9970 Eugene, OR Land o' much rain
If you find me on the air, I'm probably in my car
ham@w3eax.umd.edu <http://w3eax.umd.edu/~ham>

On Sat, 14 Feb 2004, n3drk wrote:

> I would like to know the "official" response from the ARRL on what to do
> now!
> 73's
> john
>
> ----- Original Message -----
> From: "Bill Rowlett" <kc4atu@hotmail.com>
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
> Sent: Saturday, February 14, 2004 3:30 PM
> Subject: BPL, it is time to write
>
>
> > Well, the ARRL told us before that it was not the time to write our
> elected
> > officials, it is now.
> >
> > Letters and emails, time to open the flood gates.
> >
> > 73 Bill kc4atu
> >
> > -----
> > Plan your next US getaway to one of the super destinations here.
> > <http://special.msn.com/local/hotdestinations.armx>
> >
> >
>
>
>

Date: Sun, 15 Feb 2004 01:02:07 -0500
From: PMdc361@aol.com
To: qrp-l@lehigh.edu
Subject: [168017] Re: Learn The Code
Message-ID: <50C74A27.7CAB79BC.0017E976@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1

Content-Transfer-Encoding: 8bit

Karl, using the Koch method is good but how about letting the software teach them the characters. Keep the morse completely within the head not laid out on paper. Thats the way I learned and it worked well. Not that I am a great fist but that is due to lack of use on regular basis. Just an opinion.

--

73 ditdit,

Dwayne YI9RVT/KE4RVT
Al Kut, Iraq
N33.29 E45.45
FPQRP #85
QRP-L #2201
KX1 S/N 0337

Sometimes a little brain damage can help. (George Carlin)

Date: Sun, 15 Feb 2004 08:00:44 -0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: <n6kr@elecraft.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [168018] Re: Ooops: charged Alkalines in NiMH chager....and it worked ;)
Message-ID: <BAY12-DAV17goZolmRB00034781@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "Wayne Burdick" <n6kr@elecraft.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, February 15, 2004 3:02 AM
Subject: Ooops: charged Alkalines in NiMH chager....and it worked ;)

> Don't try this at home, folks, unless you're just as intrigued as I am,
> and are
> willing to ignore about two dozen CAPITAL LETTER warnings related to
> batteries
> and rechargers: I mistakenly "recharged" four AA alkalines in a Radio
Shack
> NiMH/NiCd quick-charger (model 23-422).

>
> Imagine my horror, quickly downgraded to shock and then relief, when I
pulled
> them out and found them nicely topped off. All were at equal potential of
1.53
> V.
>
> I've been using them in my digital camera, and they definitely have been
> recharged. I'll count how many photos I get. I'm afraid to put them in a
KX1,
> although this is an obvious application for six rechargeable
non-rechargeable alkalines.
>
> I propose the name "KR Cells" for these very insult-tolerant AA batteries.
KR
> means "Kinda Rechargeable."
>
> But back to those CAPITAL LETTERS. Has anyone else tried this (on purpose
or
> not), and are there any KR Cell experts out there who can suggest whether
there
> are health risks associated with this activity?

It always has been possible to recharge "non-rechargeable" cells, and used
to be quite popular with the old zinc chloride batteries many years ago. A
NiMH/NiCd charger isn't the best way to do it, though. Unsmoothed DC used to
be recommended, but I can't remember the correct peak voltage.

73, Leon
Leon Heller, G1HSM
Email: aqzf13@dsl.pipex.com
My low-cost Philips LPC210x ARM development system:
http://www.geocities.com/leon_heller/lpc2104.html

Date: Sun, 15 Feb 2004 01:35:54 -0800
From: Wayne Burdick <n6kr@elecrafter.com>
To: qrp-l@lehigh.edu, brianb@brianboschma.com
Subject: [168019] Re: K2 - Use it as an antenna impedance analyzer
Message-ID: <402F3D72.D09EF413@elecrafter.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Brian,

You wrote:

* * *

Need an antenna impedance analyzer ? Have a K2 with an ATU ? Then save the cost of another instrument and use your K2 !

The K2 with ATU has this wonderful feature. It will display the value of the L and C components used to tune the resistive and reactive elements of your antenna or antenna and feed line. The feed line is of course part of the solution if your tuning at the end of a long run of coax.

Through the judicious use of a bit of complex algebra and placing the K2 at the base of the antenna with very short leads from K2 to antenna one can solve a complex expression to arrive at the complex impedance of the antenna in question.

* * *

Thanks for mentioning this. This is one of the reasons we put L, C, and network information into the K2's ATU menu entry.

There are two complications to keep in mind. First, the L and C values shown in the menu are estimates based on the ideal values of these components. In reality, your L values will likely be +/- 10% and C +/- 5%.

Second, the KAT2, like all antenna tuners, has some distributed stray reactance that will sometimes skew the results of your analysis, particularly on the highest bands. In some cases the strays make the network behave like a PI-net rather than an L-net, at least with very small L and C values. But in any case, the strays can transform the load into a different part of the Smith chart than expected. For example, an antenna that is in reality moderately low-Z might appear to be moderately hi-Z when it interacts with the stray X, resulting in the "wrong" values of L-net and L/C selected, even though that combination provides the best SWR. In this case the ATU is matching the antenna *and* compensating for its own strays at the same time.

When we designed the KAT2 we measured the strays at several relay settings and found them to be similar to those of other auto-tuners on the market. They're pretty repeatable, and we could have attempted to subtract them from the displayed values, but this would have taken a lot of code space we didn't have at the time.

Still, you can "pre-distort" your analysis by attempting to estimate the values of strays. One way to do this is to load the KAT2 into a 50-ohm dummy load. On any band where the resulting L and C are non-zero but SWR approaches 1:1, you'll get a clue as to the nature of the strays. Another method is to use a number of carefully measured L+R or C+R combinations, plotting the delta between actual and displayed L/C/net values in each case. The more such loads you build and

plot, the more accurate your real-world simulations will be.

Of course you also might want to accurately measure the KAT2's inductor values, removing them one at a time and checking with an ADE meter or equivalent. The cores we used have +/- 5% permeability, but "builder effect" (the amount of squeeze or spread to the windings) is usually the more significant factor.

You can do the same thing with our other ATUs (the KAT1, KXAT1, and KAT100). Each will have different distributed strays. The KAT1 and KXAT1 have a much more limited Z matching range, but also smaller values of stray X.

With this factor folded in, your impedance analysis should be quite useful!

73,
Wayne
N6KR

--

<http://www.elecrafter.com>

Date: Sun, 15 Feb 2004 06:07:41 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <n6kr@elecrafter.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [168020] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
Message-ID: <004801c3f3b3\$f05c9240\$0200a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Don't try this at home, folks, unless you're just as intrigued as I am,
> and are
> willing to ignore about two dozen CAPITAL LETTER warnings related to
> batteries
> and rechargers: I mistakenly "recharged" four AA alkalines in a Radio
> Shack
> NiMH/NiCd quick-charger (model 23-422).
>
> Imagine my horror, quickly downgraded to shock and then relief, when I
> pulled
> them out and found them nicely topped off. All were at equal potential
> of 1.53
> V.

>
> I've been using them in my digital camera, and they definitely have been
> recharged. I'll count how many photos I get. I'm afraid to put them in a
KX1,
> although this is an obvious application for six rechargeable
non-rechargeable alkalines.
>
> I propose the name "KR Cells" for these very insult-tolerant AA
batteries. KR
> means "Kinda Rechargeable."
>
> But back to those CAPITAL LETTERS. Has anyone else tried this (on
purpose or
> not), and are there any KR Cell experts out there who can suggest
whether there
> are health risks associated with this activity?

Actually, very bad. When you charge alkalines, gas bubbles form. The
rechargeable alkalines can handle the pressure. Regular ones are not
designed to. That doesn't mean they will explode or anything, but 90%
will start to seep. Eventually. Do you want them in your expensive
camera that has a warrantee that specifically excludes battery leakage
on in the warrantee?

Mike

Date: Sun, 15 Feb 2004 08:01:38 -0500
From: Rick McKee <kc8aon@juno.com>
To: fpqrp-l@fpqrp.com, qrp-l@Lehigh.EDU
Subject: [168021] Homebrewer #2
Message-ID: <20040215.080141.10030.2.kc8aon@juno.com>

Finally arrived in Southern Ohio yesterday ! Now, #3 is due this month,
does that mean we will get it sometime this summer ?

72/73 de: Rick McKee, KC8AON <> Willow Wood, Ohio <> Grid: EM88rl
SW-20+, SW-30+, SW-40+, Norcal BLT, Yaesu FT-7, Homebrew 6V6 tube TX
QRP-L #2112, FPqrp #33, AR QRP, AmQRP, Ohio Valley Fists, MQFD #1
Monthly QRP Field Day info at : <http://www.smartgroups.com/groups/mqfd>
Without CW, it's only CB ! KNOW code - not - NO code !

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Surf the Web up to FIVE TIMES FASTER!

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Date: Sun, 15 Feb 2004 06:29:17 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: Jason Hsu <reply@jasonhsu.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168022] Re: Learn the code
Message-ID: <Pine.LNX.4.44.0402150624240.5278-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 14 Feb 2004, Jason Hsu wrote:

> Oops, I meant different methods, not different messages.
>
> I'll admit that I once did try practicing copying random letter groups. I
> had such a bad experience trying it that I doubt I lasted more than 5
> minutes. Then again, your mileage may vary.

Sounds like about one 5 minute practise session. You do need the random event so you can't predict the next character. If you learn using only the letters like many do, a call sign is a foreign word. To REALLY copy code at any speed you should not be surprised to hear a / or ? or the other punctuation.

>
> Jason Hsu, AG4DG
>
>

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Sun, 15 Feb 2004 08:33:44 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: Jason Hsu <reply@jasonhsu.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [168023] Re: Learn the code
Message-ID: <402F7538.67EF15C6@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Jason,

There is no doubt that learning/teaching the code had changed in this era of Vs and 5 wpm code tests. Head copy also enters into the picture but you really cannot use "head copy" until you are pretty good at writing down the code.

Random letters and code groups are used to keep the learner on his toes. Never knowing what is coming next causes you to pay attention. It is good practice for increasing your code speed.

I also use random code groups during the teaching/learning process. My method teaches the alphabet and other characters three or four at a time, followed by extensive testing by random code groups to test what you have retained. Extensive use is also made of off the air copy. The idea is to have the student actually learn the code before branching out into "head copy" and other esoterica.

I have a short Basic program that teaches the code using a modified Farnsworth and other methods. The speed is smoothly variable from 3 to 27 wpm, both in character speed and spacing speed. It has worked in several small groups and I am quite happy with it. It was written on a Sunday afternoon back in 1982 and refined periodically ever since.

Sorry to get a bit off track. Random code groups have valuable place in learning the code. And until you can almost perfectly copy the code with a pencil and paper at, say 15 wpm, you shouldn't confuse in your mind by "head copy". Nearly practitioners of "head copy" are/have been very experienced practitioners of the art of CW. Head copy is very tempting when you have some experience, you drop a few words and it doesn't matter much. You only write down the stuff you want in your log. Seems like a win-win system, but if you start before you can really copy, and don't tune up your system periodically, your proficiency will drop off.

Bruce

PS, most of the above is my opinion. It is derived from personal experience in learning and teaching the code and a lot of thought. But also remember that there are as many opinions as those who teach the code!

Date: Sun, 15 Feb 2004 08:49:14 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-l@lehigh.edu
Subject: [168024] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
Message-ID: <402F78DA.40105@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

>

>

>But back to those CAPITAL LETTERS. Has anyone else tried this (on purpose or
>not), and are there any KR Cell experts out there who can suggest whether there
>are health risks associated with this activity?

>

It's another conspiracy by the BIG BATTERY COMPANIES to sell more
batteries. They don't want you to know they are rechargeable.

Seriously...anytime you recharge a battery, it releases gas.
"Rechargeable" batteries are vented. Non-rechargeable alkalines are not.
Your batteries may not have been too low, therefore not generating too
much gas, or they might have actually been "leaky." There IS a danger of
explosion.

John W2AGN

Date: Sun, 15 Feb 2004 08:35:30 -0600
From: "Walter AG5P" <walter@accessus.net>
To: <qrp-l@lehigh.edu>
Subject: [168025] Re: Tin Ear Receiver - reservations
Message-ID: <000d01c3f3d0\$f6ea4040\$3c466ad8@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guess the easy radio kit for beginners and others is a good
idea, however, I just can't keep from wondering the
actual shack usefulness of the Tin Ear receiver, when
Ten-Tec sells the Any Band DC receiver (#1056) with
all the components for 160 thru 10 meters, excellent
filtering at a mere \$29.00 + shipping.

<http://tentec.com/rcvrkit.htm>

I use these little DC receivers and they can rival some of the superhets we have in the QRP world.

Maybe I am missing something here.....!

73...Walter - AG5P

Date: Sun, 15 Feb 2004 09:50:32 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-l@lehigh.edu
Subject: [168026] Re: Learn the code
Message-ID: <402F8738.9040802@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

>
>
>Random letters and code groups are used to keep the learner on his
>toes. Never knowing what is coming next causes you to pay attention.
>It is good practice for increasing your code speed.
>

Also, the Commercial Radiotelgraph test consisted of random code groups, at least when I took it. Nowadays it is probably a picture of a key, with a multiple Choice Question:

Identify the above

- | | |
|--------------------------------------|--------------------|
| a. A nutcracker | c. A |
| piece of modern art | |
| b. An obsolete communications device | d. a backscratcher |

Of course, the answers are published, so only 45% identify it as "a"

John W2AGN

Date: Sun, 15 Feb 2004 09:50:34 -0500

From: "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168027] RE: Ooops: charged Alkalines in NiMH charger....and it worked ;)
Message-ID: <000601c3f3d3\$15c077d0\$6401a8c0@deer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I recharged alkalines on slow chargers for years. I get about 10 charges per battery, but not all charge well, many leak and I have been awakened to what sounded like a shotgun blast to discover a battery exploded sending my charger and battery guts all over the room.

I incorporated a heat sensor that cuts off the charger on my last charger but often I get leaky batteries.

The charger I used was a constant current charger, basically a 2 volt transformer with a single diode in series with the secondary (I don't remember how many milliamps). After the explosion, I mounted the transformer on the side of a coffee can with small holes drilled in it for ventilation and a transistor circuit that cut off the secondary current if a voltage sensor got too warm and a towel covering the top secured by a rubber band. I haven't had any other explosions, but my theory is that if it happens again the mess will remain in the can and all I have to replace is my battery holder.

My experience has been pretty good. The batteries were used in a digital camera that required 8 batteries. The camera only took about 40 pictures or so with a new pack of batteries so it was extremely expensive to use. I have since replaced the camera with a much better model that uses 2 NiMH AA batteries that take an average of 300 pictures per charge.

Before I close, let me say to those of you who would like to argue the theory that you need a higher voltage to charge a battery, you need to study up on constant current chargers. I don't care how much math or theory you throw at me, I have been successfully charging batteries with constant current chargers for 20 years or more. Please, if the theory and math tell you it can't be done, use your own methods if you like, but don't try to convince me that what I do doesn't work.

Thank you,

Sorry for the Rant mode there.

Good Luck
Buck

> -----Original Message-----

> From: Leon Heller [mailto:leon_heller@hotmail.com]
> Sent: Sunday, February 15, 2004 3:01 AM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Ooops: charged Alkalines in NiMH charger....and
> it worked ;)

>

>

>

> ----- Original Message -----

> From: "Wayne Burdick" <n6kr@elecraft.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Sunday, February 15, 2004 3:02 AM
> Subject: Ooops: charged Alkalines in NiMH charger....and it worked ;)

>

>

> > Don't try this at home, folks, unless you're just as intrigued as I
> > am,
> > and are
> > willing to ignore about two dozen CAPITAL LETTER warnings related to
> > batteries
> > and rechargers: I mistakenly "recharged" four AA alkalines
> > in a Radio
> > Shack
> > NiMH/NiCd quick-charger (model 23-422).

> >

> > Imagine my horror, quickly downgraded to shock and then
> > relief, when I
> > pulled
> > them out and found them nicely topped off. All were at
> > equal potential

> > of

> > 1.53

> > V.

> >

> > I've been using them in my digital camera, and they definitely have
> > been recharged. I'll count how many photos I get. I'm afraid to put
> > them in a

> > KX1,

> > although this is an obvious application for six rechargeable
> > non-rechargeable alkalines.

> >

> > I propose the name "KR Cells" for these very insult-tolerant AA
> > batteries.

> > KR

> > means "Kinda Rechargeable."
> >
> > But back to those CAPITAL LETTERS. Has anyone else tried this (on
> > purpose
> or
> > not), and are there any KR Cell experts out there who can suggest
> > whether
> there
> > are health risks associated with this activity?
>
> It always has been possible to recharge "non-rechargeable"
> cells, and used to be quite popular with the old zinc
> chloride batteries many years ago. A NiMH/NiCd charger isn't
> the best way to do it, though. Unsmoothed DC used to be
> recommended, but I can't remember the correct peak voltage.
>
> 73, Leon
> Leon Heller, G1HSM
> Email: aqzf13@dsl.pipex.com
> My low-cost Philips LPC210x ARM development system:
> http://www.geocities.com/leon_heller/lpc2104.h> tml
>
>
>

Date: Sun, 15 Feb 2004 11:04:34 -0500
From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168028] [Elmer 160] PIC E1 Programming Problems
Message-ID: <003901c3f3dd\$682ac020\$65dc0a0a@magnus>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Gang,
My PIC E1 doesn't seem to program. I have 'wiggled' the outputs and checked all the voltages, but FPP still says Failed to program Code! Or Failed to Program Config! Or some such nonsense.
I have tried to program the pic in my PICALL programmer with PICALLW software and it doesn't seem to work the first time but then I will retry to program it in the PIC E1 and bingo programming Success! Have any of you encountered this problem? I have only been able to get this to work with T-PICEL.HEX 4.0, the siggen hex doesn't seem to want to

program the config, hence...Failed to Program Config!
Does anyone have any idea what I am doing wrong?
Thanks in advance.
73/72 - Kevin, W8VOS

Date: Sun, 15 Feb 2004 11:25:28 -0500
From: "George Heron N2APB" <n2apb@clearviewcatv.net>
To: "NJQRP" <njqrp@njqrp.org>, "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [168029] ELSIE Kit online order status checking available
Message-ID: <008501c3f3e0\$54baad90\$6400a8c0@n2apb1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

We've now activated our automatic, online reservation status checking web page for the ELSIE Kit ... check here to see that we got your order and see when we expect to ship. <http://www.amqrp.org/kits/elsie/elsiestatus.html>

Note: If you are registered for Atlanticon, you will automatically receive an ELSIE Kit. But if you separately ordered an ELSIE Kit, this is where you check on it.

73, George N2APB

PS: Note some additional time-saving shortcuts on the AmQRP homepage <http://www.amqrp.org>

Date: Sun, 15 Feb 2004 11:34:52 -0500
From: "Brian Riley (maillist)" <n1bq_list@wulfden.org>
To: George Heron N2APB <n2apb@clearviewcatv.net>,
 Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [168030] Re: Serial DDS: PIC controls DDS via PC serial port
Message-ID: <BC5509DC.1F639%n1bq_list@wulfden.org>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"

Content-transfer-encoding: 7bit

Couple of questions, requests, observations;

1 - is it safe to assume we could pop the 16F84A from the Serial sender into the PIC-EL, then 'read' the original Serial Sender software into FPP and save a copy of the hex file? If not could you make the HEXfile for SerialSender available?

2 - could you add a listing and a Mouser part number for the 8 pin single header socket that the DDS would plug into.

3 - upon examination, it seems that in some ways the Serial Sender board could almost be PIC-EL's, slightly crippled brother. Actually it might not be a bad idea to make the whole source code for SerSndr available now that Elmer 160 is making us all PIC ASM mavens! Even more room for play

4 - Which brings me to this question SerSndr has the Max232 and takes serial input, I would guess that the software for SerSndr has the serial I/O routines in there. Now PIC-EL uses discrete transistor logic to more or less achieve the same thing. Is there any reason we cannot do serial I/O to/from the PIC-EL through those lines? Could PIC-EL be a "Super Son of Serial Sender" ????

cheers 73 de brian, n1bq

Date: Sun, 15 Feb 2004 10:53:40 -0600
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: "'Walter AG5P'" <walter@accessus.net>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168031] RE: [qrp-1] Re: Tin Ear Receiver - reservations
Message-ID: <002701c3f3e4\$4373a010\$04000000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Well, the Ten-Tec does look pretty nice and I like their stuff.

It's impossible to evaluate performance of either receiver by looking at the web page, but one difference jumps out--if you want an enclosure for the Ten-Tec, it's an extra \$22.50.

And let's not mislead with the 160 through 10 thing. The Ten-Tec design lets you choose your band, which is nice, but it's still a single band receiver.

So what's your beef, really?

72--Nick, WA5BDU

... one thing I thought was interesting on the Ten-Tec page was a variable capacitor *kit*. Now that's different.

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Walter AG5P

Sent: Sunday, February 15, 2004 8:36 AM

To: Low Power Amateur Radio Discussion

Subject: [qrp-l] Re: Tin Ear Receiver - reservations

Guess the easy radio kit for beginners and others is a good idea, however, I just can't keep from wondering the actual shack usefulness of the Tin Ear receiver, when Ten-Tec sells the Any Band DC receiver (#1056) with all the components for 160 thru 10 meters, excellent filtering at a mere \$29.00 + shipping.

<http://tentec.com/rcvrkit.htm>

I use these little DC receivers and they can rival some of the superhets we have in the QRP world.

Maybe I am missing something here.....!

73...Walter - AG5P

Date: Sat, 14 Feb 2004 12:51:55 -0500
From: Nils R Young <nilsbull@juno.com>
To: QRP-L@lehigh.edu
Subject: [168032] Tiny radios & checking your work
Message-ID: <20040214.125205.-123849.1.nilsbull@juno.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

Gang,

This could get real expensive, this getting boards done thing. Early last week I got the three copies of my first hack at building a TDA1072A receiver & spent some time & cash at Roger's getting all the capacitors & stuff for at least two. I chopped the tiny little filter parts off the end of two of the boards & then, properly medicated & listening to TSR (Ankara), I turned to putting some of the stuff on the board.

First power up, just the AF amp, nada. So I get some more meds out of the cabinet & have a couple stiff shots. Ah, Absolut vodka . . . burns clean. So the next day I discover that I'd written the S-meter trace right over the AF output trace, crossing them three places on the board with different holes for stuff that was supposed to be open. And I had the trace from the output (it's an LM386) cap shorted straight through. So it was Xacto knife time.

Eventually I got the AF amp working. Later on I got the oscillator working (way the heck up there . . . like 50 MHz . . .) & then found that its frequency was doubling in the counter input. And no way to attenuate it. So I finally found the fundamental down around 26 MHz. And using a 9 MHz IF, I could hear stuff at 16 MHz (check it out . . . there ain't much there) if I used the '706 as a sig gen into a DL. But at least I got that much working.

Next I try building the BFO. Had three lines dead shorted through the top layer that I had to use serious Xacto action on. Never did get the BFO working. More meds I guess.

So about this time I think "What else have I done in other board designs?" And no, it weren't a rhetorical question.

I gotta stop enjoying having two sides of the board to work with. Serious. I go from bottom to top as if it were some kind of divine law. One tiny transmitter design (a kluge of Jeff Anderson's radio-in-an-emptied-out-battery-case radio) had some really stupid stuff on it. And even the second rev of the TDA1072A circuit was messed up. All of it being moving top layer groundplanes too close to (or right over) lines & pads. Talk about attention deficit disorders.

Now . . . what was I talkin' about? Oh, yeah, rhetorical questions.

So the report so far: I got most of the stuff working but I'm gonna have to go back over every design so far & remember to wait a couple days

before shipping the design up to ExpressPCBs servers. Kinda like I had to learn to do with papers for grad school classes. 'Cept I never grounded out a rhetorical question on a ground plane before. Or yet. At least I got the TDA1072A chip workin' ok . . . a bit broad & a lot of Sister Lucille trying to sell me prayer cloths (coming through from somewhere/somehow) now & then as I poke & prod. (Still ain't put a front end filter on it . . .)

Ultimately though, I have to ask myself why I'm building all these tiny little radios & why I would want to build my own receiver when I've already got 17 radios, some of which shock me solid if I just plug 'em in & others of which work pretty dagnab spiffy just the way they came out of the box. And then there's all the mint-tin radios I got . . . four or five, not counting the extry & so-far unpopulated 40-o-niner board I got somewhere around here.

Oh, yeah, now I remember: Wes Hayward's "Low Poer Single-band CW Transceiver" in Ham Radio Magazine, November 1974 and Howard Batie's "Miniature 7 MHz Transceiver" in HR, July 1974. Ah, them's was fun days, them's.

Intervention call!

73

Nils

. . . found out the other day that a guy I served with in Puerto Rico was a ham oncet . . . Like la abuela Ursula says in Cien A os de Soledad, "Life's like that, only moreso."

Nils R. Bull Young -- W8IJN -- La Estancia de los Guajolotes Sonrientes
-- <http://w8ijn.tripod.com> -- <http://members.fortunecity.com/nilsbull> --
"If you can see this, thank a trilobite!"

The best thing to hit the Internet in years - Juno SpeedBand!
Surf the Web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sun, 15 Feb 2004 12:57:36 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-l@lehigh.edu
Subject: [168033] RE: [qrp-l] Re: Tin Ear Receiver - reservations
Message-ID: <200402151257.36232.jsielke@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain;

charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

>So what's your beef, really?

OK, I really wonder. Why is it when anyone questions, or provides information on an alternative, to anything relating to the AmQRP Club, or any of it's Leaders, the reaction is automatically defensive?

I realize we are dealing with some of the Icons of QRP, but certainly there is room for alternatives, and, dare I suggest, even criticism on occasion?]

John W2AGN

Date: Sun, 15 Feb 2004 11:10:25 -0700
From: Dave Ek <ekdave@earthlink.net>
To: qrp-1@lehigh.edu
Subject: [168034] Re: Serial DDS: PIC controls DDS via PC serial port
Message-ID: <402FB611.20700005@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Brian,

The source and hex code for the Serial Sender are on my web site:

<http://home.earthlink.net/~golog>

You can restore the original Serial Sender code whenever you'd like. Or you could buy another PIC16F84 and just swap the two.

73 de Dave NK0E

Brian wrote:

1 - is it safe to assume we could pop the 16F84A from the Serial sender into the PIC-EL, then 'read' the original Serial Sender software into FPP and save a copy of the hex file? If not could you make the HEXfile for SerialSender available?

2 - could you add a listing and a Mouser part number for the 8 pin single header socket that the DDS would plug into.

3 - upon examination, it seems that in some ways the Serial Sender board could almost be PIC-EL's, slightly crippled brother. Actually it might not be a bad idea to make the whole source code for SerSndr available now that Elmer 160 is making us all PIC ASM mavens! Even more room for play

4 - Which brings me to this question SerSndr has the Max232 and takes serial input, I would guess that the software for SerSndr has the serial I/O routines in there. Now PIC-EL uses discrete transistor logic to more or less achieve the same thing. Is there any reason we cannot do serial I/O to/from the PIC-EL through those lines? Could PIC-El be a "Super Son of Serial Sender" ????

Date: Sun, 15 Feb 2004 13:10:09 -0500
From: "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [168035] RE: Learn the code
Message-ID: <000d01c3f3ee\$f6e7fab0\$6401a8c0@deer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I learned Morse code the hard way; 3 cassette tapes!

I started learning the dits and dahs and individual letters at 3 wpm. I am very thankful for the man who took the time to make the tapes and donate them to me for free. But, I would have rather had today's technology and the KOSH method (I have been a ham for 25 years now.)

It took me months to learn 8 wpm before taking my novice test and six months more to build my speed to 13 wpm to pass my general. Thanks to Novice Roundup in progress when I took my exam at the FCC office, I managed to copy the call signs of the QSO on the test.

I have read responses from a number of people who learned Morse code which talked about their weaknesses after years of learning developed from their methods of learning. The method I used left me weak on the numbers because they were the last things taught. The letters were learned slowly and then after all the letters were learned, the speed of all letters, numbers and punctuation was increased. The 5 letter code

groups were eventually memorized so I became weak in some of the letters in spite of the amount of practice I put in to learn them. In the musical study method that Jason learned on, I have heard people that learned it complain that they are still stalling out on speed because their mind doesn't hear "C" but "Catch-it, Catch-it". Its hard for them to spell "Cat" when they hear "Catch-it, Catch-it, At A, Time". This is hard to unlearn when the student is trying to pickup words by hearing the word phonetically for head-reading, "Kh AA TT" (I am sure there are other ways of learning head reading but this is the one I heard complained about.)

It is my conclusion and opinion that choosing a method for learning code should be based on how the student plans to use the code. If it is just for the test to be forgotten later, it makes little difference in the learning method as none will have long-term consequences, but if the student wants to use the code for operation, then it becomes more important.

My mind is caught between the Farnsworth and Koch methods. Farnsworth being send at a desired speed but space at a lower speed, then decrease the spacing until the student is copying the fast speed at normal spacing. Koch being that the student learn only one or two letters at the time at the student's desired speed goal with normal spacing.

My 12 year old son who had no previous exposure to Morse code learned the first four letters in the Koch method (G4FON's Software) at 20 wpm, proper spacing in less than 10 minutes. However, we cheated the Koch a little by starting him out at 11 wpm and increasing it to 15 wpm. 5 minutes each. I believe the original author of this thread estimates that a student using his method will learn the code in 7 days. I may be wrong, but I don't believe the majority will learn code his way in just a week. But then again, he is probably pushing for just the 5 wpm.

However, if the students have the G4FON software, I believe they should at least start with 15 wpm with 9 wpm spacing. The reason is that they will have to learn to write the code without thinking about it and will learn it well. The actual test will probably be 7-8 wpm at 5 wpm spacing, at least that's what it was when I last took my extra test late last year.

As for the code groups, I don't like the 5-letter code groups that were so popular when I was learning code because when I heard a long word, even knowing the letters my mind paused after 5 letters. The variable letters in the Koch software teaches the spacing much better. That feature alone boosted the quality of my copying code. I used it as a refresher after being away from Ham radio for 10 years.

If a student wishes to learn and use code, I suggest he use either the

Koch software (G4FON's program) at 15 or 20 wpm with the SAME spacing. If desired, increase the speed after that. When I used it as a refresher, I studied 5 characters at the time at 20wpm with 15 wpm spacing and then increased it to 20/20 wpm. Then I added another 5 characters and studied at 20/15, then 20/20.

I have since learned that Koch actually said learn the code at the full speed and spacing for your desired level of learning, i.e. 15/15, 20/20, or 30/30, etc.

I have and use G4FON's Koch software but I don't worship it. I believe Bruce uses a different program using the Farnsworth method. I am not familiar with it but I have heard of a lot of people that learned that way successfully with little or no hang-ups to follow them as they increase their operating speed.

One last word about the random characters. If you know code, you can copy code groups. If you don't know the letters, you can't. The object is to learn the code. If you see missing letters, you can learn what the letter is and pick it up, but if you get used to patterns, you tend to anticipate the characters and make more mistakes, even when you can read the characters. ANT is the word going to be Antenna or Antlers? Actually, it was Antonio.

For those in this conversation who learned code already, congratulations. For those of you trying to learn, refresh or increase your speed, I wish you the best. Chances are that Koch will be the fastest means of reaching your goals, but if that's a little too hard, drop back to Farnsworth. If you are just trying to get your license and you don't think you want to use code otherwise, you might try the musical method if you think Koch and Farnsworth aren't for you. I don't know where to find the musical method, but G4FON's software is free and does both Koch and Farnsworth.

Good Luck to all

Buck

Date: Sun, 15 Feb 2004 13:13:38 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <na4fm-list@towncorp.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [168036] Re: Ooops: charged Alkalines in NiMH charger....and it worked ;)
Message-ID: <007001c3f3ef\$8d79aa00\$0200a8c0@charter.net>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Actually, constant current is absolutely the WORST technique you can use to charge alkaline technology.

Best is a 'pulse look' technique. That's what Renewal batteries use. In fact, the 'Renewal' chargers work great on generic alkalines. And even then most don't leak.

Only catch is the Renewal chargers charge off the 'base rim', and most alkalines EXCEPT Renewals are solid base. Renewals are solid button. (Look at regular alkalines and see what the 'barrel' connects to as opposed to what Renewal cells connect to)

Mike

Date: Sun, 15 Feb 2004 13:31:53 -0500
From: "George Heron N2APB" <n2apb@clearviewcatv.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [168037] Re: Serial DDS: PIC controls DDS via PC serial port
Message-ID: <000501c3f3f1\$fe6e3850\$6400a8c0@n2apb1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

> 1 - is it safe to assume we could pop the 16F84A from the Serial sender into
> the PIC-EL, then 'read' the original Serial Sender software into FPP and
> save a copy of the hex file? If not could you make the HEXfile for
> SerialSender available?

Although the process you describe will work, Serial Sender software (asm and hex) is already available on the Serial Sender web page. See the "Source Code" and the "Hex Code" links at <http://www.njqrp.org/palmserialsender>

> 2 - could you add a listing and a Mouser part number for the 8 pin single
> header socket that the DDS would plug into.

The 8-position SIP socket supplied with the kit is cut down from a 36-position strip: Mouser p/n 517-974-01-36. I don't yet have a supplier for a right-angle version with long leads suitable for elevating the socket 3/8" above the board.

>
> 3 - upon examination, it seems that in some ways the Serial Sender board
> could almost be PIC-EL's, slightly crippled brother. Actually it might not
> be a bad idea to make the whole source code for SerSndr available now that
> Elmer 160 is making us all PIC ASM mavens! Even more room for play

We actually almost went the route of using the Serial Sender boards. But
by the time we added a couple of parts needed, and determined that the
programming capability was essential, we abandoned the Serial Sender board
to design one specifically for the Elmer 160 course. This was definitely
the better decision.

> 4 - Which brings me to this question SerSndr has the Max232 and takes
> serial input, I would guess that the software for SerSndr has the serial
I/O
> routines in there. Now PIC-EL uses discrete transistor logic to more or
less
> achieve the same thing. Is there any reason we cannot do serial I/O
to/from
> the PIC-EL through those lines? Could PIC-EL be a "Super Son of Serial
> Sender" ????

This is a feature we "missed", in that the serial port is really only
suitable for programming the PIC. It would take some additional jumpers and
such to allow the PIC to communicate back over the serial port in a
conventional manner. I agree that this might be a kuseful mod to make in
the future ... we'll see what could be done.

73, George N2APB

Date: Sun, 15 Feb 2004 13:33:44 -0500
From: "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168038] RE: Ooops: charged Alkalines in NiMH chager....and it worked ;)
Message-ID: <000e01c3f3f2\$42a30140\$6401a8c0@deer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I don't profess that I use the "best" method, it just worked when I
needed it to. :)

I haven't examined the renewals since the price and availability of NiMH batteries and chargers is so much more affordable than the "good-ole-days".

I have to admit, it is nice to hear someone else that understands constant current. I once believed that the only two people in the world that knew about it was me and the Tempo corporation from whom I learned about it.

Buck

```
> -----Original Message-----
> From: Mike Yetsko [mailto:myetsko@insydesw.com]
> Sent: Sunday, February 15, 2004 1:14 PM
> To: na4fm-list@towncorp.net; Low Power Amateur Radio Discussion
> Subject: Re: Ooops: charged Alkalines in NiMH charger....and
> it worked ;)
>
>
> Actually, constant current is absolutely the WORST technique you
> can use to charge alkaline technology.
>
> Best is a 'pulse look' technique. That's what Renewal
> batteries use. In fact, the 'Renewal' chargers work great on
> generic alkalines. And even then most don't leak.
>
> Only catch is the Renewal chargers charge off the 'base rim',
> and most alkalines EXCEPT Renewals are solid base. Renewals
> are solid
> button. (Look at regular alkalines and see what the 'barrel'
> connects to as opposed to what Renewal cells connect to)
>
> Mike
>
>
>
```

Date: Sun, 15 Feb 2004 12:38:47 -0600
From: "Lew Paceley" <lew@paceley.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Cc: <adverseyaw@twmi.rr.com>
Subject: [168039] Re: [Elmer 160] PIC E1 Programming Problems
Message-ID: <003101c3f3f2\$f367b0c0\$6501a8c0@swbell.net>
MIME-Version: 1.0

Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Kevin,
I've only seen the "Fail to Program Config" once and that was when I didn't have the processor type set correctly in FPP. Not sure if you've been through this already but you'll find the current processor type at the top left of the title bar of the FPP window. You can set the processor type using the SETUP button.

Hope this helps. GL!

72/73,
Lew
N5ZE

Date: Sun, 15 Feb 2004 13:38:45 -0500
From: "Joseph Trombino Jr" <w2kj@bellsouth.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [168040] Fw: RH-40 discrepancy (Red Hot radio)
Message-ID: <006a01c3f3f2\$f225bae0\$220110ac@gateway.2wire.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Never did get a response so am trying again hoping that some kind RH-40 builder might be able to help me out.

73, Joe W2KJ

> Howdy Gang:
>
> Believe I have spotted a mistake in the RH-40 manual. T7, according to the
> written instructions has 18 turns on the primary and 3 turns on the
> secondary.
>
> The schematic has it as 18 turns and 4 turns.
>
> Anybody have any info on this discrepancy??? How many turns should the
> secondary have???

>
>
> 73, Joe W2KJ
> North Carolina
> I QRP, therefore I am
>

Date: Sun, 15 Feb 2004 13:48:48 -0500
From: "Jeff Davis" <jeff@ke9v.net>
To: "Low Power" <qrp-1@Lehigh.EDU>
Subject: [168041] Z Antenna Systems
Message-ID: <008101c3f3f4\$59c0c040\$9800a8c0@ke9v>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone tried one of these yet? Comments?

<http://home.cogeco.ca/~zantenna/>

--
Jeff

Date: Sun, 15 Feb 2004 18:50:19 +0000
From: "Bill Rowlett" <kc4atu@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [168042] RE: [qrp-1] Re: Tin Ear Receiver - reservations
Message-ID: <BAY14-F30Dp7mvjk02200006b9d@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I do not believe there is a "beef" other than the fact that the world does not need another receiver of the type offered. Neat idea, good cause, but, its just another 40 meter rec. How many do we need?

Have a good day, I am back to dx and new band countries.

Bill kc4atu

>From: "Nick Kennedy" <wa5bdu@tcainternet.com>
>Reply-To: <nkennedy@tcainternet.com>

>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: RE: [qrp-1] Re: Tin Ear Receiver - reservations
>Date: Sun, 15 Feb 2004 10:53:40 -0600
>
>Well, the Ten-Tec does look pretty nice and I like their stuff.
>
>It's impossible to evaluate performance of either receiver by looking at
>the web page, but one difference jumps out--if you want an enclosure for
>the Ten-Tec, it's an extra \$22.50.
>
>And let's not mislead with the 160 through 10 thing. The Ten-Tec design
>lets you choose your band, which is nice, but it's still a single band
>receiver.
>
>So what's your beef, really?
>
>72--Nick, WA5BDU
>
>... one thing I thought was interesting on the Ten-Tec page was a
>variable capacitor *kit*. Now that's different.
>
>
>-----Original Message-----
>From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf
>Of Walter AG5P
>Sent: Sunday, February 15, 2004 8:36 AM
>To: Low Power Amateur Radio Discussion
>Subject: [qrp-1] Re: Tin Ear Receiver - reservations
>
>
>Guess the easy radio kit for beginners and others is a good idea,
>however, I just can't keep from wondering the
>actual shack usefullness of the Tin Ear receiver, when
>Ten-Tec sells the Any Band DC receiver (#1056) with
>all the components for 160 thru 10 meters, excellent
>filtering at a mere \$29.00 + shipping.
>
><http://tentec.com/rcvkit.htm>
>
>I use these little DC receivers and they can rival some
>of the superhets we have in the QRP world.
>
>Maybe I am missing something here.....!
>
>73...Walter - AG5P
>
>
>

>

Optimize your Internet experience to the max with the new MSN Premium
Internet Software. <http://click.atdmt.com/AVE/go/onm00200359ave/direct/01/>

Date: Sun, 15 Feb 2004 13:51:48 -0500
From: "Dale Anderson \ (KB0VCC\)" <KB0VCC@Adelphia.Net>
To: <qrp-1@Lehigh.EDU>
Subject: [168043] Re: Learn the code
Message-ID: <000301c3f3f4\$c4c01bc0\$6401a8c0@HPNotebook>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

>And until you can almost perfectly copy the
>code with a pencil and paper at, say 15 wpm, you shouldn't confusion im
>your mind by "head copy". Nearly practitioners of "head copy" are/have
>been very experienced practitioners of the art of CW.

Gee, I put the pencil down at around 8 wpm after discovering my speed-handicap wasn't the translation from CW to characters but from CW to WRITTEN characters. It took me 2 years of mind-numbing "random code groups" to get to just 5 wpm. Moving to head-copy and NON-random text, my speed increased rapidly. In 3 months, I passed the 20 wpm test (could have passed 28 wpm) when upgrading to General Class. I took that test entirely head-copy. The advantage of non-random text with head-copy is that you basically get instant feedback as to whether what you thought you copied makes any sense. I never did master the writing-while-copying thing, with the exception of noting names, callsigns, QTH, etc. Even today, at best I can only write down translated character-by-character CW at 12 wpm. Yet, I can easily head-copy conversational CW at 30+ wpm while holding two simultaneous conversations with my wife and kids, while also listening to CNN Headline News on the TV and skimming through email. Obviously whatever learning disability I have which impedes my written translation, isn't the result of a deficiency in multi-tasking. I've also noticed that I can NOT send nearly as fast as I can head-copy, nor can I effectively send when someone is in the room asking me something that I must verbally respond to in any detail. Maybe I've a brain-to-hand wiring problem while ears-to-brain works great thereby making me some neurologist's dream case-study. Who knows!

Anyway, I think it's a mistake to say, "do it this way" or "do it that way" to everyone, as their individual learning style may differ. At best, we can all offer tips, suggestions and caveats so the students can determine which works best for them.

Only my 2 cents, and as always your YMMV.
72/73,
Dale

Date: Sun, 15 Feb 2004 12:52:56 -0600
From: "Craig Johnson" <cbjohns@cbjohns.com>
To: <qrp-1@lehigh.edu>
Subject: [168044] Re: [Elmer 160] PIC El Programming Problems
Message-ID: <000301c3f3f4\$eef884e0\$6201a8c0@cbjp2>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Kevin,

>My PIC El doesn't seem to program. I have 'wiggled' the outputs and
>checked all the voltages, but FPP still says Failed to program Code! Or
>Failed to Program Config! Or some such nonsense.
>I have tried to program the pic in my PICALL programmer with PICALLW
>software and it doesn't seem to work the first time but then I will
>retry to program it in the PIC El and bingo programming Success! Have
>any of you encountered this problem? I have only been able to get this
>to work with T-PICEL.HEX 4.0, the siggen hex doesn't seem to want to
>program the config, hence...Failed to Program Config!
>Does anyone have any idea what I am doing wrong?
>Thanks in advance.
>73/72 - Kevin, W8VOS

Interesting. The fact that the PIC-EL can "sometimes" program the PIC makes me think the hardware is working properly.

A couple of things to double check.

- 1) Make sure you have the processor type set to 16F84.
- 2) Make sure you have the four boxes checked on the main screen
(Code, Data, ID, Config)

If these are correct, we will have to try something else.

72,
Craig, AA0ZZ

Date: Sun, 15 Feb 2004 13:53:59 -0500
From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "'Lew Paceley'" <lew@paceley.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [168045] RE: [Elmer 160] PIC E1 Programming Problems
Message-ID: <004001c3f3f5\$12e2dae0\$65dc0a0a@magnus>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Lew,
That is set correctly. It is set to 16F84, though I am using the
16F84A-04. I have also tried my 16F84A-20 and that doesn't work either.
My voltage readings are good. Pin 13 has 3.56V on it when it is
enabled. Pin 12 has 5.01V. Pin 4 has the Vp_{gm} voltage of 11.57V and
drops to 5.01V with the test.
My voltages look good (I think, don't know about pin 13) just don't know
what I am doing wrong.
73/72 - Kevin, W8VOS

-----Original Message-----
From: Lew Paceley [mailto:lew@paceley.com]
Sent: Sunday, February 15, 2004 1:39 PM
To: Low Power Amateur Radio Discussion
Cc: adverseyaw@twmi.rr.com
Subject: Re: [Elmer 160] PIC E1 Programming Problems

Hi Kevin,
I've only seen the "Fail to Program Config" once and that was when I
didn't have the processor type set correctly in FPP. Not sure if you've
been through this already but you'll find the current processor type at
the top left of the title bar of the FPP window. You can set the
processor type using the SETUP button.

Hope this helps. GL!

72/73,
Lew
N5ZE

Date: Sun, 15 Feb 2004 12:57:34 -0600
From: "Walter AG5P" <walter@accessus.net>
To: <qrp-1@lehigh.edu>
Subject: [168046] RE: [qrp-1] Re: Tin Ear Receiver - reservations
Message-ID: <000701c3f3f5\$92dd0040\$1d466ad8@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Nick,
Certainly No Beef from me, just as in anything, there are options to explore. If the goal is getting new folks into the amateur radio world, then making options for their review would seem to be appropriate. The target audience is used to making decisions.

Since we are on decisions, my humble appologies to WA60TP for not including his Bells Receiver in the first posting. This is a very similar receiver to the Tin Ear and James, even includes a schematic on the webpage if you want to build your own and not buy a packaged kit from him. His PTO works very nicely. See:

<http://www.wa6otp.com/40bells.htm>

There are lots of options and suppliers for receivers of the DC, Regen, Superhets, and Crystal type units. A search on google.com or your favorite search engine will yield more hits than most folks have time to explore.

Happy Building...73...Walter - AG5P

Date: Sun, 15 Feb 2004 14:07:56 -0500
From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: <cbjohns@cbjohns.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168047] RE: [Elmer 160] PIC El Programming Problems

Message-ID: <004101c3f3f7\$0556eb80\$65dc0a0a@magnus>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Craig,

I have the processor set to 16F84 and all the boxes are checked. I figured out that the RUN button allows the program to be executed in the PIC even though the switch is set to 'program'. [I figured this out when I was able to program the one PIC (16F84A-20P)] Also, FPP does erase the PIC in the programmer, I have confirmed this.

I am using Windows XP Professional on a Dual Celeron (366) computer. I have the IO service enabled, and it is started.

Where do we go next?

73/72 - Kevin, W8VOS

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Craig Johnson

Sent: Sunday, February 15, 2004 1:53 PM

To: Low Power Amateur Radio Discussion

Subject: Re: [Elmer 160] PIC El Programming Problems

Kevin,

>My PIC El doesn't seem to program. I have 'wiggled' the outputs and
>checked all the voltages, but FPP still says Failed to program Code! Or

>Failed to Program Config! Or some such nonsense. I have tried to
>program the pic in my PICALL programmer with PICALLW software and it
>doesn't seem to work the first time but then I will retry to program it

>in the PIC El and bingo programming Success! Have any of you
>encountered this problem? I have only been able to get this to work
>with T-PICEL.HEX 4.0, the siggen hex doesn't seem to want to program
>the config, hence...Failed to Program Config! Does anyone have any idea

>what I am doing wrong? Thanks in advance.

>73/72 - Kevin, W8VOS

Interesting. The fact that the PIC-EL can "sometimes" program the PIC makes me think the hardware is working properly.

A couple of things to double check.

- 1) Make sure you have the processor type set to 16F84.
- 2) Make sure you have the four boxes checked on the main screen
(Code, Data, ID, Config)

If these are correct, we will have to try something else.

72,
Craig, AA0ZZ

Date: Sun, 15 Feb 2004 11:10:24 -0800 (PST)
From: Garie Halstead K8KFJ <khyberpass65@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168048] Re: DX with QRP today
Message-ID: <20040215191024.32384.qmail@web60303.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

--- "W.D. (Doc) Lindsey" <dock0evz@earthlink.net> wrote:

> Gang: Today 15 has been open into Albuquerque, NM, and I
> bagged ZD8R on 21.023. Then about an hour later got ZD8A
> on *20* Metres.

All of this coming week should be a good time to pick up some new ones
Doc (should the bands hold up). Next weekend is ARRL Intl DX (CW) and
many of the ops are already at their DX locations testing equipment and
antenna systems. Grab 'em now before the feeding frenzy starts. HI

72, Gary -K8KFJ-

Do you Yahoo!?
Yahoo! Finance: Get your refund fast by filing online.
<http://taxes.yahoo.com/filing.html>

Date: Sun, 15 Feb 2004 19:15:51 -0000
From: "Ray Goff" <radioham@gmx.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168049] RE: Z Antenna Systems
Message-ID: <ACEBKECEJKBMLBLMPOHJOEKNDBAA.radioham@gmx.co.uk>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Could it be a magnetic loop in disguise?

72/73

Ray, G4FON

```
> -----Original Message-----
> From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of
> Jeff Davis
> Sent: 15 February 2004 18:49
> To: Low Power Amateur Radio Discussion
> Subject: Z Antenna Systems
>
>
> Anyone tried one of these yet? Comments?
>
> http://home.cogeco.ca/~zantenna/
>
> --
> Jeff
>
>
```

Date: Sun, 15 Feb 2004 14:17:22 -0500
From: "NA4FM \ (Buck\)" <na4fm-list@towncorp.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168050] RE: Learn the code
Message-ID: <000f01c3f3f8\$5c4e9a40\$6401a8c0@deer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

You are right about someone saying "Do it This way!"

I can't head copy much yet, but I have your problem at 20 wpm. I can't write any faster than that.

I do have a bit of a cheater though, I use N3FJP's Amateur Contact Log that pulls up the information for each call sign I put in. As a result, I just listen to see if the name, city, etc are the same. I only write down those things that are needed, but if we get into a rag-chew, I have to write down the text or lose it before he finishes.

I am using the Koch software to strengthen my 20 wpm code speed so it is easier to copy. As a result, I think I am getting better at higher speeds as well. Sometime soon I will probably be copying faster and more in my head.

Buck

> -----Original Message-----

> From: Dale Anderson (KB0VCC) [mailto:KB0VCC@Adelphia.Net]

> Sent: Sunday, February 15, 2004 1:52 PM

> To: Low Power Amateur Radio Discussion

> Subject: Re: Learn the code

>

>

> >And until you can almost perfectly copy the

> >code with a pencil and paper at, say 15 wpm, you shouldn't
> confusion im

> >your mind by "head copy". Nearly practitioners of "head
> copy" are/have

> >been very experienced practitioners of the art of CW.

>

> Gee, I put the pencil down at around 8 wpm after discovering

> my speed-handicap wasn't the translation from CW to

> characters but from CW to WRITTEN characters. It took me 2

> years of mind-numbing "random code groups" to get to just 5

> wpm. Moving to head-copy and NON-random text, my speed

> increased rapidly. In 3 months, I passed the 20 wpm test

> (could have passed 28 wpm) when upgrading to General Class.

> I took that test entirely head-copy. The advantage of

> non-random text with head-copy is that you basically get

> instant feedback as to whether what you thought you copied

> makes any sense. I never did master the

> writing-while-copying thing, with the exception of noting

> names, callsigns, QTH, etc. Even today, at best I can only

> write down translated character-by-character CW at 12 wpm.

> Yet, I can easily head-copy conversational CW at 30+ wpm

> while holding two simultaneous conversations with my wife and

> kids, while also listening to CNN Headline News on the TV and

> skimming through email. Obviously whatever learning

> disability I have which impedes my written translation, isn't

> the result of a deficiency in multi-tasking. I've also

> noticed that I can NOT send nearly as fast as I can

> head-copy, nor can I effectively send when someone is in the

> room asking me something that I must verbally respond to in

> any detail. Maybe I've a brain-to-hand wiring problem while

> ears-to-brain works great thereby making me some

> neurologist's dream case-study. Who knows!

>
> Anyway, I think it's a mistake to say, "do it this way" or
> "do it that way" to everyone, as their individual learning
> style may differ. At best, we can all offer tips,
> suggestions and caveats so the students can determine which
> works best for them.
>
> Only my 2 cents, and as always your YMMV.
> 72/73,
> Dale
>
>
>
>
>
>
>

Date: Sun, 15 Feb 2004 19:19:03 -0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: <w2kj@bellsouth.net>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168051] Re: RH-40 discrepancy (Red Hot radio)
Message-ID: <BAY12-DAV12BEfqaw9r000347df@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Joseph Trombino Jr" <w2kj@bellsouth.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Sunday, February 15, 2004 6:38 PM
Subject: Fw: RH-40 discrepancy (Red Hot radio)

> Never did get a response so am trying again hoping that some kind RH-40
> builder might be able to help me out.

If it's a broadband (untuned) transformer it won't really make any
difference.

73, Leon

--

Leon Heller, G1HSM
Email: aqzf13@dsl.pipex.com
My low-cost Philips LPC210x ARM development system:
http://www.geocities.com/leon_heller/lpc2104.html

Date: Sun, 15 Feb 2004 13:24:09 -0600
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: <kc4atu@hotmail.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168052] RE: [qrp-1] Re: Tin Ear Receiver - reservations
Message-ID: <000601c3f3f9\$49822ca0\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

First, my apologies to Walter if I came on too strong in my first post,
and I guess I did.

But on the idea that we don't "need" another receiver, another
transmitter, another SWR bridge, another microcontroller programmer ...
I guess I agree that we don't "need" any of this stuff, just as we don't
even need hobbies at all.

Given this, what should be the quota on how many of each device we will
allow to be put before the public? Who will make the choice of which
ones are acceptable for display? Mustn't give the people too many
choices.

TNX & 72--

Nick, WA5BDU

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf
Of Bill Rowlett

Neat idea, good cause, but,
its just another 40 meter rec. How many do we need?

Date: Sun, 15 Feb 2004 14:32:42 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Cc: <adverseyaw@twmi.rr.com>
Subject: [168053] Re: [Elmer 160] PIC E1 Programming Problems
Message-ID: <001f01c3f3fa\$7b903dd0\$090044c0@BrianBoru>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Kevin

Two things ... the fact that the PIC seems to be willing to program sometimes sounds to me as if maybe the "Prog Cycle Delay" is too short. Try increasing that. Normally it's 20 msec, you might try 30 or 40. More common is for the I/O delay to be too short. You might also try playing with that. I think the default is 40 although quite often a smaller number will work sometimes. If you are getting programming failures, though, I would make it longer.

3.56 sounds a little low, but several others have reported success with a similar voltage.

Lesson 11 should be posted shortly and it has some more info about troubleshooting.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, February 15, 2004 1:53 PM
Subject: RE: [Elmer 160] PIC E1 Programming Problems

> Lew,
> That is set correctly. It is set to 16F84, though I am using the
> 16F84A-04. I have also tried my 16F84A-20 and that doesn't work either.
> My voltage readings are good. Pin 13 has 3.56V on it when it is
> enabled. Pin 12 has 5.01V. Pin 4 has the Vp gm voltage of 11.57V and
> drops to 5.01V with the test.
> My voltages look good (I think, don't know about pin 13) just don't know
> what I am doing wrong.
> 73/72 - Kevin, W8VOS
>
>

> -----Original Message-----
> From: Lew Paceley [mailto:lew@paceley.com]
> Sent: Sunday, February 15, 2004 1:39 PM
> To: Low Power Amateur Radio Discussion
> Cc: adverseyaw@twmi.rr.com
> Subject: Re: [Elmer 160] PIC E1 Programming Problems
>
>
> Hi Kevin,
> I've only seen the "Fail to Program Config" once and that was when I
> didn't have the processor type set correctly in FPP. Not sure if you've
> been through this already but you'll find the current processor type at
> the top left of the title bar of the FPP window. You can set the
> processor type using the SETUP button.
>
> Hope this helps. GL!
>
> 72/73,
> *Lew*
> N5ZE
>
>
>
>

Date: Sun, 15 Feb 2004 14:34:16 EST
From: Mercxx@aol.com
To: qrp-1@lehigh.edu
Subject: [168054] Norcal 40A Information needed
Message-ID: <118.2eed6e0e.2d6123b8@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Good afternoon,

I am thinking about building a Norcal 40A from Wilderness radio and I have a couple of questions to ask about building this kit. I would appreciate a contact off list from anyone who has built this kit that would not mind me asking some questions. Thanks and have a great day.

73
Steve
N4TKP
Bartow, Florida

Date: Sun, 15 Feb 2004 14:46:10 -0500
From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "'John J. McDonough'" <wb8rcr@arrl.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [168055] RE: [Elmer 160] PIC El Programming Problems
Message-ID: <004201c3f3fc\$5d145e70\$65dc0a0a@magnus>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

John,
Here is what I have tried so far...

Result	Program Delay	I/O Delay
Fail	20ms	6ticks
Fail	30ms	6ticks
Fail	40ms	6ticks
Fail	50ms	6ticks
Fail	20ms	8ticks
Fail	30ms	8ticks
Fail	40ms	8ticks
Fail	50ms	8ticks
Fail	20ms	10ticks
Fail	30ms	10ticks
Fail	40ms	10ticks
Fail	50ms	10ticks

I am using a 6' serial cable to connect to the PIC-EL. I know that with the PICALL they recommend 3' or less. Would this make a difference? (PICALL is Parallel).
73/72 - Kevin, W8VOS

-----Original Message-----
From: John J. McDonough [mailto:wb8rcr@arrl.net]
Sent: Sunday, February 15, 2004 2:33 PM
To: Low Power Amateur Radio Discussion
Cc: adverseyaw@twmi.rr.com
Subject: Re: [Elmer 160] PIC El Programming Problems

Kevin

Two things ... the fact that the PIC seems to be willing to program sometimes sounds to me as if maybe the "Prog Cycle Delay" is too short. Try increasing that. Normally it's 20 msec, you might try 30 or 40. More common is for the I/O delay to be too short. You might also try playing with that. I think the default is 40 although quite often a smaller number will work sometimes. If you are getting programming failures, though, I would make it longer.

3.56 sounds a little low, but several others have reported success with a similar voltage.

Lesson 11 should be posted shortly and it has some more info about troubleshooting.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, February 15, 2004 1:53 PM
Subject: RE: [Elmer 160] PIC E1 Programming Problems

> Lew,
> That is set correctly. It is set to 16F84, though I am using the
> 16F84A-04. I have also tried my 16F84A-20 and that doesn't work
> either. My voltage readings are good. Pin 13 has 3.56V on it when it
> is enabled. Pin 12 has 5.01V. Pin 4 has the Vpgm voltage of 11.57V
> and drops to 5.01V with the test. My voltages look good (I think,
> don't know about pin 13) just don't know what I am doing wrong.
> 73/72 - Kevin, W8VOS

>
>

> -----Original Message-----

> From: Lew Paceley [<mailto:lew@paceley.com>]
> Sent: Sunday, February 15, 2004 1:39 PM
> To: Low Power Amateur Radio Discussion
> Cc: adverseyaw@twmi.rr.com
> Subject: Re: [Elmer 160] PIC E1 Programming Problems

>
>

> Hi Kevin,
> I've only seen the "Fail to Program Config" once and that was when I
> didn't have the processor type set correctly in FPP. Not sure if
> you've been through this already but you'll find the current processor

> type at the top left of the title bar of the FPP window. You can set

> the processor type using the SETUP button.

>

> Hope this helps. GL!

>

> 72/73,

> *Lew*

> N5ZE

>

>

>

>

Date: Sun, 15 Feb 2004 15:05:33 -0500

From: "John J. McDonough" <wb8rcr@arrl.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>

Subject: [168056] Re: [Elmer 160] PIC El Programming Problems

Message-ID: <005601c3f3ff\$1209ad60\$090044c0@BrianBoru>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

>From what I can tell, "ticks" needs to be well above 20 for the serial cable. I get successful programming with ticks set to 20 with a 3' serial cable, but I get more reliable times at 40. I'm guessing that at 20 there are more retries which stretches out the programming time and makes it more erratic. With a 6 foot cable, I would think you may need to go higher still.

When you increase the I/O delay you stretch out the programming time, but if you start to get too short it stretches out too, due to errors. Making all three of these numbers very large will make programming take longer, but should not make it fail, so it's safe to try very large numbers then back off them until you reach the best setup.

I suspect (but I have to admit that I don't know for sure owing to the lack of any documentation), that the programming cycle delay is going to be somewhat affected by the particular PIC, the power up delay by the programmer, and the I/O delay by the cable. My numbers for the PIC-EL and a 3 foot cable are 20, 25, 40. My numbers for a parallel programmer with a low capacitance cable are 20, 25, 6. My PIC-EL doesn't work with the I/O delay much below 10, and even at 20 the times are sometimes quite long. At 40 it's pretty decent, though.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "'John J. McDonough'" <wb8rcr@arrl.net>; "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, February 15, 2004 2:46 PM
Subject: RE: [Elmer 160] PIC El Programming Problems

> John,
> Here is what I have tried so far...
>
> Result Program Delay I/O Delay
> Fail 20ms 6ticks
> Fail 30ms 6ticks
> Fail 40ms 6ticks
> Fail 50ms 6ticks
> Fail 20ms 8ticks
> Fail 30ms 8ticks
> Fail 40ms 8ticks
> Fail 50ms 8ticks
> Fail 20ms 10ticks
> Fail 30ms 10ticks
> Fail 40ms 10ticks
> Fail 50ms 10ticks
>
> I am using a 6' serial cable to connect to the PIC-EL. I know that with
> the PICALL they recommend 3' or less. Would this make a difference?
> (PICALL is Parallel).
> 73/72 - Kevin, W8VOS
>
>
>
> -----Original Message-----
> From: John J. McDonough [<mailto:wb8rcr@arrl.net>]
> Sent: Sunday, February 15, 2004 2:33 PM
> To: Low Power Amateur Radio Discussion
> Cc: adverseyaw@twmi.rr.com
> Subject: Re: [Elmer 160] PIC El Programming Problems
>
>
> Kevin
>
> Two things ... the fact that the PIC seems to be willing to program
> sometimes sounds to me as if maybe the "Prog Cycle Delay" is too short.

> Try increasing that. Normally it's 20 msec, you might try 30 or 40.
> More common is for the I/O delay to be too short. You might also try
> playing with that. I think the default is 40 although quite often a
> smaller number will work sometimes. If you are getting programming
> failures, though, I would make it longer.
>
> 3.56 sounds a little low, but several others have reported success with
> a similar voltage.
>
> Lesson 11 should be posted shortly and it has some more info about
> troubleshooting.
>
> 72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
> didileydadidah QRP-L #1446 Code Warriors #35
>
> ----- Original Message -----
> From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
> Sent: Sunday, February 15, 2004 1:53 PM
> Subject: RE: [Elmer 160] PIC E1 Programming Problems
>
>
> > Lew,
> > That is set correctly. It is set to 16F84, though I am using the
> > 16F84A-04. I have also tried my 16F84A-20 and that doesn't work
> > either. My voltage readings are good. Pin 13 has 3.56V on it when it
> > is enabled. Pin 12 has 5.01V. Pin 4 has the Vpgm voltage of 11.57V
> > and drops to 5.01V with the test. My voltages look good (I think,
> > don't know about pin 13) just don't know what I am doing wrong.
> > 73/72 - Kevin, W8VOS
> >
> >
> > -----Original Message-----
> > From: Lew Paceley [<mailto:lew@paceley.com>]
> > Sent: Sunday, February 15, 2004 1:39 PM
> > To: Low Power Amateur Radio Discussion
> > Cc: adverseyaw@twmi.rr.com
> > Subject: Re: [Elmer 160] PIC E1 Programming Problems
> >
> >
> > Hi Kevin,
> > I've only seen the "Fail to Program Config" once and that was when I
> > didn't have the processor type set correctly in FPP. Not sure if
> > you've been through this already but you'll find the current processor
> >
> > type at the top left of the title bar of the FPP window. You can set
> > the processor type using the SETUP button.
> >

> > Hope this helps. GL!

> >

> > 72/73,

> > *Lew*

> > N5ZE

> >

> >

> >

> >

>

>

>

>

Date: Sun, 15 Feb 2004 15:11:53 -0500

From: "Russ Hines" <wb8zcc@fuse.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [168057] Re: Z Antenna Systems

Message-ID: <001601c3f3ff\$f41bab90\$4407c00a@WB8ZCC2>

No, I haven't tried one of these. You bet, I have some thoughts and questions.

1) I'm not clear what the page author is calling Proximity Effect. To what exactly is he referring?

And proximal to what? Ground? Conductors external to the antenna? Or other radiators that are part of the antenna?

You can see why this sentence confuses me:

"For best performance, Proximity Effect antennas should be installed outdoors in the clear."

2) 1.73 dBi is not great. A simple dipole is greater than 2 dBi. But it's small and supposed to be compact, and uses small conductors, so I'd expect small gain, small efficiency and narrow bandwidth figures. But his bandwidth figures are not narrow. In fact, they appear optimistic. Far too optimistic for me. I'd wager my dummy load with some wires attached to it is has greater bandwidth and might challenge that gain figure as well. Maybe not.

3) I don't know about you but I probably could build a small, 1.73 dBi antenna for 80m for a lot less than \$95 plus shipping. Maybe not.

4) I see patents are pending. I guess that means if you ask questions, you won't get answers, since they're all proprietary, of course. That's convenient. Kind of like Radio Shack.

5) Hmm, there's a capacitor to facilitate tuning and a choke balun attached to what looks like a loop of wire on spreaders. By golly, looks like it could be a resonant circuit. Maybe not.

6) I don't see any kind of efficiency stats for this antenna. How much of my antenna input power is actually radiated?

7) Things that appear too good to be true, usually are.

I'd like a LOT more information than what's provided on the gentleman's web page before I'd plunk \$100 down on something like this. But that's just me. Caveat Emptor.

One last comment: I've used a transmatch hooked up to the metal heating ductwork in my house. You wouldn't believe the performance.

73,
Russ
WB8ZCC

----- Original Message -----

From: "Jeff Davis" <jeff@ke9v.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Sunday, February 15, 2004 1:48 PM

Subject: Z Antenna Systems

> Anyone tried one of these yet? Comments?

>

> <http://home.cogeco.ca/~zantenna/>

>

> --

> Jeff

>

Date: Sun, 15 Feb 2004 15:16:29 -0500
From: "Pieter Gaskin" <pgaskin@twcnny.rr.com>
To: <qrp-l@Lehigh.EDU>
Cc: <pgaskin@twcnny.rr.com>
Subject: [168058] Head Copy Tips...Anyone?
Message-ID: <000301c3f400\$990c3fc0\$b5bc3a18@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The "learn the code" has got me thinking about how one develops head copy. I passed my 20wpm Extra some years ago without any problem....this with QRM of a city employee entering the room and getting a soda from the machine in the break room the test was being given in.....good thing I operated CW on a regular basis before taking the test :^)

I am,after several years off the air,getting back into things and would really like to head copy instead of writing things down.After the "layoff" I can still copy writing it down quite well and can hear small words(the,and,etc.).The problem I am running into is keeping the concentration once I miss a word or letter.

Any tips out there to help me improve?How have some of you learned?

73/72

Pete

N2PG

Date: Sun, 15 Feb 2004 15:19:18 -0500
From: Ed Tanton <n4xy@earthlink.net>
To: jeff@ke9v.net,
 "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [168059] Re: Z Antenna Systems
Message-ID: <6.0.3.0.2.20040215151143.01d4ab98@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

There's an excellent unrelated explanation of the main principle "Proximity Effect] the designer of this antenna bases his design on at:

<http://www.csee.umbc.edu/~plusquel/650/slides/transmission_lines3.html> .
It's a bit mathematical... but that's probably as it should be, isn't it?
[grin]

Note that the designer says his antenna's gain is: 1.7dBi . Also note that it is specifically designed for 'open air mounting' (he says it would degrade SWR.)

Finally, remember Ed's Corollary: "Small antennas = Small Signals". Doesn't mean they don't work... just means they suffer in comparison to full-sized antennas. I suspect in a matchup between THIS antenna and a reduced-size vertical, this antenna would do as well-maybe better for being a closed-loop. But just how hard is a 30 or 40ft non-resonant longwire to do?

At 01:48 PM 2/15/2004, Jeff Davis wrote:

>Anyone tried one of these yet? Comments?
>
><http://home.cogeco.ca/~zantenna/>
>
>--
>Jeff

73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

"He that gives up a little liberty to gain
temporary security will lose both and
deserve neither".
--Benjamin Franklin

"Suppose you were an idiot ...
and suppose you were a member of
Congress... but I repeat myself."
--Mark Twain

Date: Sun, 15 Feb 2004 14:37:17 -0600
From: "Craig Johnson" <cbjohns@cbjohns.com>

To: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@lehigh.edu>
Subject: [168060] Re: [Elmer 160] PIC E1 Programming Problems
Message-ID: <000501c3f403\$80bdd6b0\$6201a8c0@cbjp2>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Kevin,
> Craig,
> I have the processor set to 16F84 and all the boxes are checked. I
> figured out that the RUN button allows the program to be executed in the
> PIC even though the switch is set to 'program'. [I figured this out
> when I was able to program the one PIC (16F84A-20P)] Also, FPP does
> erase the PIC in the programmer, I have confirmed this.
> I am using Windows XP Professional on a Dual Celeron (366) computer. I
> have the IO service enabled, and it is started.
> Where do we go next?
> 73/72 - Kevin, W8VOS

Here are a few things to try -

This may sound strange, but I'm wondering if the READ side is failing. If something related to Q4 (i.e. R9, R10, or the CTS connection) is not working properly, FPP will quickly report it as a failure in programming. FPP does not wait for the entire program to be sent to the PIC, but writes and then reads back and to see if it's working.

Have you tried reading from the PIC? Start FPP, clear the buffer, and press the Read button. Hopefully you will see a variety of data. Not all zeros and not all 3FFF's.

Assuming this is not the problem, I am a little concerned about the fact that you think it is "running", even when the S1 switch is in PROGRAM mode. Switching from RUN to PROGRAM mode should be enough to stop the program because there is a momentary loss of +5v on the MCLR pin. Is it possible that the MCLR pin (pin 4) is never going to zero?

After the switch is in PROGRAM position, you start FPP. Then, to start the actual programming sequence, FPP must drive the Vpgm line signal down to zero and then quickly up to 12v (or so). This drop to zero should be enough to master clear the PIC and tell it it is being programmed via RB6 and RB7.

(You may see writing remain on the LCD when programming. That's just left over data

in the LCD's memory.) However, you should not see the program continue to operate.

72,
Craig, AA0ZZ

Date: Sun, 15 Feb 2004 13:28:28 -0800 (PST)
From: Mark Hogan <n5obc@yahoo.com>
To: nkennedy@tcainternet.com,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168061] RE: [qrp-1] Re: Tin Ear Receiver - reservations
Message-ID: <20040215212828.81736.qmail@web9607.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Oh well another qrp1 trauma day...
I hate to say it, I looked at the tentec receivers after the post, and think I'll order one after my tin ears are built. Yes ears, plural, as in 2 each. I thought it was such a cool little radio in a nice box that I would build one for my nephew, possibly kindling some interest in ham radio. Isn't that what we are supposed to do?
We might be missing the point on some of this small stuff. Its inexpensive to get, easy to build, shows some promise for reception, and can be given away or loaned out.
I let people borrow anything I own. Its easiest to loan a qrp rig/tuner/dipole, and build interest. Now with little receivers there is no real need for the tuner key etc.
On the other hand I love to build, use the key some, and get enjoyment out of the finished product!
Bring on more simple kits, they are cool.
Mark Hogan / N50BC

--- Nick Kennedy <wa5bdu@tcainternet.com> wrote:
>
> But on the idea that we don't "need" another
> receiver, another
>

Do you Yahoo!?

Yahoo! Finance: Get your refund fast by filing online.

<http://taxes.yahoo.com/filing.html>

Date: Sun, 15 Feb 2004 16:50:16 -0500

From: Frank Brickley <brickley@pobox.com>

To: pgaskin@twcny.rr.com

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [168062] Re: Head Copy Tips...Anyone?

Message-ID: <402FE998.2010102@pobox.com>

MIME-version: 1.0

Content-type: text/plain; charset=us-ascii; format=flowed

Content-transfer-encoding: 7BIT

In one of the classic works about learning Morse, it's suggested to have somebody read to you out of a newspaper or magazine, but instead of reading it straight, spelling out each word. The idea is to beef up independently your skills at forming words out of streams of letters.

I'd be reluctant to ask somebody to do that for very long, but you have to wonder whether one of the text-to-speech computer programs couldn't be made to do it easily on properly prepared textfiles.

73

Frank

AB2KT

Pieter Gaskin wrote:

> The "learn the code" has got me thinking about how one develops head copy.
> I passed my 20wpm Extra some years ago without any problem....this with QRM
> of a city employee entering the room and getting a soda from the machine in
> the break room the test was being given in.....good thing I operated CW
> on a regular basis before taking the test :^)
> I am,after several years off the air,getting back into things and would
> really like to head copy instead of writing things down.After the "layoff" I
> can still copy writing it down quite well and can hear small
> words(the,and,etc.).The problem I am running into is keeping the
> concentration once I miss a word or letter.
> Any tips out there to help me improve?How have some of you learned?
> 73/72
> Pete
> N2PG
>

>
>

Date: Sun, 15 Feb 2004 17:06:19 -0500
From: "Kevin M., W8VOS" <adverseyaw@twmi.rr.com>
To: "'Craig Johnson'" <cbjohns@cbjohns.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168063] RE: [Elmer 160] PIC E1 Programming Problems
Message-ID: <000201c3f40f\$f156a4e0\$64dc0a0a@magnus>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Craig,

> Here are a few things to try -
>
> This may sound strange, but I'm wondering if the READ side is
> failing. If
> something related to Q4 (i.e. R9, R10, or the CTS connection)
> is not working properly, FPP will quickly report it as a
> failure in programming. FPP does not wait for the entire
> program to be sent to the PIC, but writes and then reads back
> and to see if it's working.

I went over solder joints and all looks good.

> Have you tried reading from the PIC? Start FPP, clear the
> buffer, and press the Read
> button. Hopefully you will see a variety of data. Not all
> zeros and not all 3FFF's.

This works as advertised with the preprogrammed one from the kit.

> Assuming this is not the problem, I am a little concerned
> about the fact that you think it is "running", even when the
> S1 switch is in PROGRAM mode. Switching from RUN to PROGRAM
> mode should be enough to stop the program because there is
> a momentary loss of +5v on the MCLR pin. Is it possible that
> the MCLR pin (pin 4) is never going to zero?

I say this because when I was in program mode, I pressed the "RUN" button on FPP GUI and the LED3 went out and the pic started running its program. Checking with a voltmeter I find that PIN 4 has .724V, then when 'RUN' is pressed it jumps to 11.54V and LED3 goes out. Does this seem correct?

>
> After the switch is in PROGRAM position, you start FPP. Then,
> to start the actual programming sequence, FPP must drive the
> Vpgm line signal down to zero and
> then quickly up to 12v (or so). This drop to zero should be
> enough to master clear
> the PIC and tell it it is being programmed via RB6 and RB7.

Checking this with a voltmeter I get .724V , then when I press OK on the message box that pops up "Establishing program mode... OK to program?"; it jumps up to about 2.04V (Fluke 87 [MIN MAX] 100ms record). Then back to .724V again when it fails.

> (You may see writing remain on the LCD when programming.
> That's just left over data in the LCD's memory.) However,
> you should not see the program continue to operate.
>
> 72,
> Craig, AA0ZZ
>
>

Date: Sun, 15 Feb 2004 17:23:24 -0600
From: "Tony Martin W4FOA" <w4foa@comcast.net>
To: <pgaskin@twcnny.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [168064] Re: Head Copy Tips...Anyone?
Message-ID: <00b601c3f41a\$b57ea9d0\$6401a8c0@De1ldude>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Pete,

I realize this is not the "tip" you were looking for but I honestly think there is no substitute for practice.

While there are some of the CW gang that still do serious ragchewing, I

think many spend too little time working on building up their speed by practice through ragchewing. Maybe it is a sign of the times that we don't have time to spend on "long, get-to-know-you" QSOs but I do think that is the secret to increasing one's proficiency. The "hello/goodbye" QSOs just won't do it and of course the DX chasing is even less help in building up confidence.

One sure hinderance to fast headcopy is finding yourself getting tripped up because you miss a letter now and then. When you get to the point where you can anticipate the end of the word and even the next word(s), you will then be copying by "word" and not by letters...that really is the key.

Good luck...keep in there practicing Pete.

73

Tony, W4FOA

----- Original Message -----

From: "Pieter Gaskin" <pgaskin@twcnny.rr.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Sunday, February 15, 2004 2:16 PM

Subject: Head Copy Tips...Anyone?

> The "learn the code" has got me thinking about how one develops head copy.
> I passed my 20wpm Extra some years ago without any problem....this with QRM
> of a city employee entering the room and getting a soda from the machine in
> the break room the test was being given in.....good thing I operated CW
> on a regular basis before taking the test :^)
> I am,after several years off the air,getting back into things and would
> really like to head copy instead of writing things down.After the "layoff" I
> can still copy writing it down quite well and can hear small
> words(the,and,etc.).The problem I am running into is keeping the
> concentration once I miss a word or letter.
> Any tips out there to help me improve?How have some of you learned?
> 73/72
> Pete
> N2PG
>

Date: Sun, 15 Feb 2004 16:28:52 -0600
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: <pgaskin@twcnny.rr.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [168065] RE: [qrp-1] Head Copy Tips...Anyone?
Message-ID: <000f01c3f413\$177dc420\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

A couple of things helped me, I think. One was getting on the air a lot (this was a long time ago). Another was just leaving the receiver turned on in a moderately crowded band, none too selective, while I was doing other things.

One warning though ... if you get used to "head copy" and do nothing else, eventually you may lose the ability to "write it down" effectively.

72--Nick, WA5BDU

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Pieter Gaskin

The "learn the code" has got me thinking about how one develops head copy. Any tips out there to help me improve? How have some of you learned? 73/72 Pete N2PG

Date: Sun, 15 Feb 2004 17:34:19 -0500
From: Tom Mc <redmen1969@optonline.net>
To: na4fm-list@towncorp.net,
 Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168066] Re: Learn the code
Message-ID: <001401c3f413\$db78f840\$b34ab818@x2f6a2>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

I Agree with Buck on this one...I can't write that fast...what's the secret I wonder? When you hear the guys sending at 30 or 40 wpm what is going on at the receiving end? Are they only jotting down key words and phrases, or

is there something else going on. I do recall having read about certain ways to form the various characters (which I don't do) that will make the pencil strokes more efficient, but even with that, I don't think I can write that fast.

Any ideas?

Tom WB2QDG

-----Original Message-----

From: NA4FM (Buck) <na4fm-list@towncorp.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Sunday, February 15, 2004 5:08 PM
Subject: RE: Learn the code

You are right about someone saying "Do it This way!"

I can't head copy much yet, but I have your problem at 20 wpm. I can't write any faster than that.

I do have a bit of a cheater though, I use N3FJP's Amateur Contact Log that pulls up the information for each call sign I put in. As a result, I just listen to see if the name, city, etc are the same. I only write down those things that are needed, but if we get into a rag-chew, I have to write down the text or lose it before he finishes.

I am using the Koch software to strengthen my 20 wpm code speed so it is easier to copy. As a result, I think I am getting better at higher speeds as well. Sometime soon I will probably be copying faster and more in my head.

Buck

> -----Original Message-----

> From: Dale Anderson (KB0VCC) [mailto:KB0VCC@Adelphia.Net]
> Sent: Sunday, February 15, 2004 1:52 PM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Learn the code
>
>
> >And until you can almost perfectly copy the
> >code with a pencil and paper at, say 15 wpm, you shouldn't
> >confusion in
> >your mind by "head copy". Nearly practitioners of "head
> >copy" are/have
> >been very experienced practitioners of the art of CW.
>

> Gee, I put the pencil down at around 8 wpm after discovering
> my speed-handicap wasn't the translation from CW to
> characters but from CW to WRITTEN characters. It took me 2
> years of mind-numbing "random code groups" to get to just 5
> wpm. Moving to head-copy and NON-random text, my speed
> increased rapidly. In 3 months, I passed the 20 wpm test
> (could have passed 28 wpm) when upgrading to General Class.
> I took that test entirely head-copy. The advantage of
> non-random text with head-copy is that you basically get
> instant feedback as to whether what you thought you copied
> makes any sense. I never did master the
> writing-while-copying thing, with the exception of noting
> names, callsigns, QTH, etc. Even today, at best I can only
> write down translated character-by-character CW at 12 wpm.
> Yet, I can easily head-copy conversational CW at 30+ wpm
> while holding two simultaneous conversations with my wife and
> kids, while also listening to CNN Headline News on the TV and
> skimming through email. Obviously whatever learning
> disability I have which impedes my written translation, isn't
> the result of a deficiency in multi-tasking. I've also
> noticed that I can NOT send nearly as fast as I can
> head-copy, nor can I effectively send when someone is in the
> room asking me something that I must verbally respond to in
> any detail. Maybe I've a brain-to-hand wiring problem while
> ears-to-brain works great thereby making me some
> neurologist's dream case-study. Who knows!
>
> Anyway, I think it's a mistake to say, "do it this way" or
> "do it that way" to everyone, as their individual learning
> style may differ. At best, we can all offer tips,
> suggestions and caveats so the students can determine which
> works best for them.
>
> Only my 2 cents, and as always your YMMV.
> 72/73,
> Dale
>
>
>
>
>
>
>

Date: Sun, 15 Feb 2004 17:36:40 -0500
From: Tom Mc <redmen1969@optonline.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168067] Fw: Z Antenna Systems
Message-ID: <003901c3f414\$30ca6680\$b34ab818@x2f6a2>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Looks pretty good -- Are we trying to defy the laws of physics again??
Tom, WB2QDG

>-----Original Message-----
>From: Jeff Davis <jeff@ke9v.net>
>To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
>Date: Sunday, February 15, 2004 1:55 PM
>Subject: Z Antenna Systems
>
>
>Anyone tried one of these yet? Comments?
>
><http://home.cogeco.ca/~zantenna/>
>
>--
>Jeff
>

Date: Sun, 15 Feb 2004 14:56:15 -0800 (PST)
From: Mark Hogan <n5obc@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [168068] Re: Head Copy Tips...Anyone?
Message-ID: <20040215225615.42447.qmail@web9609.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Well the best tip has been let...practice!
Listen to the qrp calling freq's while you piddle in
the shack. Get the mfj code tutor, carry it and USE
it...just let it run on words and ick them out from
time to time. Download the arrl code mp3s, burn them
to cd and run them in the car...just play cw low, and

steady, you'll be suprised how quick it comes.
Most of all have fun!
Mark Hogan / N50BC

Do you Yahoo!?
Yahoo! Finance: Get your refund fast by filing online.
<http://taxes.yahoo.com/filing.html>

Date: Sun, 15 Feb 2004 22:56:12 +0000
From: "LEE HOPPER" <leehopp@msn.com>
To: qrp-1@Lehigh.EDU
Subject: [168069] CW: Love on the Wire...
Message-ID: <BAY4-F14eIEb9pIXsFR000314f5@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Interested in a love story between two oldtime telegraph ops? Goto:

<<http://www.nextbigthing.org/>>

and look for "Love on the Wire" - it's a great story and has a *lot* to do with CW. This is an audio file you can play on you computer. I heard it on NPR today.

73 -

Lee Hopper, NB7F

Click here for a FREE online computer virus scan from McAfee.
<http://clinic.mcafee.com/clinic/ibuy/campaign.asp?cid=3963>

Date: Sun, 15 Feb 2004 16:58:39 -0600
From: "N1LN_TXU" <n1ln@txucom.net>
To: "QRP-L" <qrp-1@Lehigh.EDU>
Subject: [168070] Pesky Texan Armadillo Chase (email 2)
Message-ID: <019b01c3f417\$407461a0\$6401a8c0@txucom.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Only 3 1/2 weeks left before the 2004 Armadillo Chase.

We have 19 Armadillos signed up for sure and 2 maybes, but hope to have 20 for the chase. Here are the Armadillos so far.

N5TW - Tom
K5ZTY - Bill
WF5W - Cal
W5YR - George
W5PF - Paul

W5MJ - Madison
W5SB - Bill
N5ET - Bob
W5TA - Dick
W5TB - Doc

K5WAF - Bill
K5NZ - Mike
W5USJ - Chuck
K5GQ - Mark
N5BE - Dan

N05W - Chuck
W5VX - Bill
KG5U - Dale
K5PTC - Bob (that's me - - N1LN, Bruce)

KK5LD - Dan (not yet sure)
KQ5U - Terry (not yet sure)

For more information about the Armadillo Chase please refer to the NARS web site: www.w5nc.org and look for the link to the Armadillo Chase or go directly to: <http://www.w5nc.org/ptac/default.htm>

72,
Bruce - N1LN
(K5PTC - Bob)

Date: Sun, 15 Feb 2004 17:12:25 -0600
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "FPigs" <fpqrp-1@mpna.com>,

"Elecrafft@mailman.qth.net" <elecrafft@mailman.qth.net>
Cc: "qrp-1" <qrp-1@lehigh.edu>, "FSQRP" <4sqrp@mailman.qth.net>
Subject: [168071] The Time Is Drawing Near
Message-ID: <000701c3f419\$2dea5ec0\$7238d90c@mchsi.com>

Are you ready to " RUN FOR THE BACON " ?????

>From 0100z to 0300z this evening !!!!
<http://www.fpqrp.com/fpqrpapun.html>

Come join the fun. Hope to C U there !

72 Jerry N0JRN

FP # 546, 4SQRP, ARS # 923, ARCI # 11049, ARRL,
Springfield, Mo. MP + #8
<http://home.mchsi.com/~n0jrn>

Date: Sun, 15 Feb 2004 18:21:29 -0500
From: Peter Burbank <peterlee@qx.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [168072] RE: [qrp-1] Head Copy Tips...Anyone?
Message-ID: <5.2.0.9.0.20040215180544.00a3e160@mail.qx.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I was thinking along the same lines as Nick regarding head copy. Tune in a rag chew while working around the shack and just "read the mail". The ARRL code practice sessions are a good source. IMHO a big factor in the success of this method is that it removes any stress that you may have about missing a few characters and seems to create a smooth, relaxed flow of text into your massive brain. Another benefit is being able to keep some track of band condx. For example, on 40 right now a C06 is calling cq and an F9 responding.
73 Pete NV4V

At 05:28 PM 2/15/2004, Nick Kennedy wrote:
>A couple of things helped me, I think. One was getting on the air a lot
>(this was a long time ago). Another was just leaving the receiver
>turned on in a moderately crowded band, none too selective, while I was

>doing other things.

>

>One warning though ... if you get used to "head copy" and do nothing

>else, eventually you may lose the ability to "write it down"

>effectively.

>

>72--Nick, WA5BDU

>

>-----Original Message-----

>From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf

>Of Pieter Gaskin

>

>

> The "learn the code" has got me thinking about how one develops head

>copy. Any tips out there to help me improve?How have some of you

>learned? 73/72 Pete N2PG

End of QRP-L Digest 3197
